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CONSERVATION.

THE chief event of the year for Archæology, and one which has marked a new era in the history of conservation work in India, has been the passing of the Ancient Monuments' Act. The question of taking measures to protect and preserve the many historic monuments and relics in private possession was taken up by Lord Curzon during the first year of his administration, and the law which has now come into force is the outcome of long and careful deliberation. The main objects which the Viceroy set before himself were three-fold :—to ensure the proper upkeep and repair of ancient buildings in private ownership excepting such as were used for religious purposes ; to prevent the excavation of sites of historic interest by ignorant and unauthorised persons ; and to secure control over the traffic in antiquities. These objects could only be attained by legislation, and inquiries were at once set on foot for the purpose of ascertaining the law and practice which prevailed in European countries. The outcome of these inquiries was that a Bill was drafted based on the existing English Acts and embodying also certain provisions derived from recent legislation on the subject in Greece and Italy, but modified in some of its essential features so as to suit the peculiar conditions of this country. The drafting of the Bill, involving, as it did, direct interference with the rights of private ownership, was of necessity a most delicate and difficult matter, and the difficulty was enhanced by the necessity of paying scrupulous respect to the religious prejudices of the Indian people. It therefore speaks volumes for the careful and sympathetic handling which this Bill received, that, when circulated for the opinion of Local Governments, there was not one of its essential provisions which did not meet with their unanimous approval, and that not a voice was raised in adverse criticism against it when it eventually passed into law.

The main provisions of the Act are probably well enough known already to readers in India, but for the sake of those in Europe who may be interested in the preservation of monuments either in this country or elsewhere, the following summary of it may be given with advantage. The Act applies only to such monuments as are expressly brought within its compass by a notification in an official gazette. It provides that, in the case of private monuments, the owner or manager of a building, which is insufficiently conserved, may be invited to enter into an agreement for its proper maintenance, and in the event of his refusing, the Collector may, if there is an endowment, take steps to secure its proper application to the repairs of the monument ; or he may, if necessary for its preservation, acquire the monument compulsorily ; but

buildings used for religious observances are expressly exempted from the operation of this clause. The Government have been careful to make it clear that there is to be no resort to compulsory acquisition until the owner has been given the opportunity of entering into an agreement. A right of pre-emption is also secured to Government in case of the transfer of ancient monuments or their sites. The Act further gives power to prohibit both the exportation of moveable antiquities from British India, and their importation from foreign territories into British India, thus putting an effectual check upon the spoliation of interesting remains situated outside the limits of British territory Provision is also made for keeping moveable antiquities *in situ*, or for preserving them in local museums, and in certain cases for the compulsory purchase of such antiquities, an exception being made of objects from which the owner is unwilling to part on personal or religious grounds. Finally, the Act empowers the Government to prohibit or regulate the excavation of ancient sites by irresponsible persons.

Many will, perhaps, be disposed to regret that non-interference in anything connected with the religions of this country has come to be looked upon as so fixed a maxim of the Indian Government, and that any temples or mosques in actual use—which, be it noted, constitute a large proportion of the national monuments—may still be demolished with impunity, along with all their priceless records, at the caprice of their owners or trustees; and their regrets will be keenest, when they call to mind the hundreds of beautiful shrines which have so long suffered at the hands of religious enthusiasts in Southern India: enthusiasts, who conceive that the replacing of an old temple by a new one is the highest form of devotion to its god. There is some consolation, however, in the knowledge that the solicitude lately shown by Government for the preservation of monuments in their original and true character is already exercising a wholesome influence upon those whom legislation does not touch, and in the hope, too, that before long popular opinion itself will prove more powerful than any laws to put a check upon the destruction or tasteless disfigurement of ancient buildings. As an instance of how this influence is spreading, let me mention the enlightened and sympathetic attitude recently taken up by the manager of the Rāmeśvaram temple, when its proposed rebuilding at the hands of the Nattukottai Chetties was called in question, in contrast to the obstinate disregard with which the appeals alike of Government and of the Royal Asiatic Society on the same subject had previously been treated.

The monuments in India proper which are mainly engaging the attention of the Survey, fall naturally into two distinct classes—Muhammadan and Hindu; in the latter of which I include also Jaina and Buddhist. This grouping I propose to follow in speaking of their repairs, and it will be the more convenient to do so as the essential differences in the character of the two groups are largely reflected in the treatment which they receive. For, whereas restoration, both structural and ornamental, is common among Muhammadan monuments, it is seldom found advisable to attempt it among the Hindu. This broad distinction in the character of the two groups and in the handling of their repairs deserves some further explanation. The main structural features of the majority of Hindu buildings, in which they differ materially from Saracenic, are their solid stone walls, stone columns and architraves,

and flat ceilings—all of which readily lend themselves to simple measures of conservation. If the masonry of the walls has bulged and loosened, it can be relaid or secured with clamps and dowels; columns that are out of plumb can be set straight; broken architraves can be supported on neat angle irons; and cracked roof slabs can be bolted up from above. More radical measures than these are generally uncalled for, and as often as not would be prohibited by their cost and the risk which they involve to the building. Another striking characteristic of Hindu architecture is the profuse sculptured decoration with which it is embellished, and which is hardly ever capable of perfect reproduction. Much of it consists of rich floral arabesques, but much also of divine and human figures executed in high relief, each of which is impressed with the personal spirit of the sculptor who created it, and each endowed with an individuality different from that of its neighbours. So that, even if we could recall the spirit of the old artist, we could yet only conjecture the details of a missing or half-broken image.

In Muhammadan structures, by which I mean those of the true Saracenic style, all this is different. Simple measures, such as those referred to, are often quite unavailing either to remedy the mischief that time has already done to them or to check its further progress. Once their domes or arches have become cracked, and heavy masses of brickwork displaced, nothing short of the most radical measures will secure their permanent safety; nor will mere surface patchwork suffice to arrest decay which has penetrated to the core of their rubble walls. Bonds of iron and timber props—the kind of expedients which Ruskin was so fond of advocating—are wholly ineffectual to preserve such structures as these. Again, the restoration of Saracenic ornament offers no such difficulty as the Hindu. Saracenic designs seldom consist of anything but a repetition of geometrical or, it may be, simple floral patterns, reproduced mechanically and admitting of little or no individuality of treatment. We might take a hundred or a thousand examples of the same ornaments among the ancient buildings at Agra, and we should fail to distinguish one from the other, or to trace in them any of the various hands that executed them. It is true that there is a certain characteristic spirit pervading them all, but this spirit lives on also in the handiwork of the present day sculptors, who are the lineal descendants of the old craftsmen, and who display in their work that perfect mastery over material which only unbroken tradition and hereditary instinct can give them.[1]

It will be understood, of course, that the above broad distinction between the Hindu and Saracenic styles cannot be pressed too far. There are exceptions to this, as to every other rule, and we shall see later that one of the most famous Hindu memorials—the "Tower of Fame" at Chitor—is at the present moment undergoing a very considerable measure of necessary structural restoration; while, on the other hand, there are many Moslem edifices in out-of-the-way places which economic considerations make it impossible to restore to the extent that could be wished.

To turn now to the work of the past year, it should be stated at the outset that all the undertakings of importance owe their inception directly to His Excellency

[1] It goes without saying, of course, that the strictest limits have to be set to such works of restoration—limits which will ensure that nothing is restored which is not known to be absolutely true to the original, and nothing renovated which is not essential to the safety or beauty of a building. An exception, however, must be made in the case of ancient gardens, in which the laying down of grass swards, for instance, is a very reasonable concession to modern taste.

Lord Curzon, and their unqualified success to the personal supervision which he has bestowed upon them. First and foremost among these come the restorations among the four famous groups of Mug͟hal monuments at Agra, Fatḥpur Sīkrī, Delhi and Lahor. Though belonging to the same age, built in the same style and bound together by the same historical associations, the fate of these four groups of monuments has been widely dissimilar. Those at Agra and Fatḥpur Sīkrī—thanks perhaps to their exceptional beauty—have been fortunate both in escaping irreparable damage during the early days of British occupation, and later in securing careful attention from a succession of sympathetic Governments. Those at Lahor and Delhi on the other hand were systematically mutilated by Mahrāttas, Sikhs and English, and, save for a few spasmodic efforts now and again to rescue the most renowned among them from decay, have been suffered to go year by year from bad to worse. Thus it is that at the present moment we find ourselves on the eve almost of closing a long campaign of work at the two former places, while we are opening a new one at the two latter.

At the Tāj at Agra, the beautiful *Jawāb* has now undergone a similar transformation to that already effected at the Masjid, while a conspicuous ornament has been restored to the gardens by the repair of the decorative battlements which crown their circuit walls. Simultaneously, the beauty of the tomb, as seen from the main approach, has been strikingly enhanced by cutting down some of the heavier trees which used to screen both mosque and *Jawāb*, and thus bringing into view the whole group of buildings as they were originally intended to be seen. So far as the edifices in the actual gardens of the Tāj are concerned, these works are, it is hoped, the last on an extensive scale that will have to be undertaken for many years to come. Minor repairs will, of course, be periodically required, and there is still ample scope for improvement in the planting out of the gardens, but the latter work is one which can only be achieved slowly and cautiously, since any sweeping changes, which would detract from the present beauty of the gardens, are obviously undesirable, however productive of good results they might be in the long run.

Among the immediate surroundings of the Tāj, the garden of the Sahelī Burj at the south-west corner of the entrance quadrangle has undergone a great improvement, its whole area having been excavated and laid out again according to the original plan. Another of the Burjs has come under repair, and the regrading and draining of the quadrangle has been finished. Here, too, may be mentioned the protective work done to one of the kiosks in the old Mahtāb Bāg͟h—the reputed site chosen for S͟hāh Jahān's black mausoleum—on the further bank of the Jumna; and the repair of Humāyūn's masjid in the village of Kachpura close by.

In the Fort, the repairs of the buildings around the Angūrī Bāg͟h and Machhī Bhawan, which I referred to in my last year's Report, have been continued, and the clearance and renovation of the Dīwān-i-'Āmm quadrangle extended to its western half. All the modern casemates here—relics of the time when the quadrangle was used as an arsenal yard—have been dismantled, and the ancient arcades which they screened from view are now in course of repair; the ugly break in the arcades on the north side has been closed; and the columns in the Hall of Audience, which were sadly defaced some years ago under a mistaken idea about their original character, have

had their glistening white stucco restored to them. Another famous monument in the Agra group that has also come in for a large share of attention is the Mausoleum of Akbar at Sikandarah. Here the work upon the east gateway has been continued and some of the kiosks at the corners of the garden repaired.

The condition of Fatḥpur Sīkrī is, if anything, even more satisfactory than that of Agra, and, indeed, this group of palace monuments is the most perfectly preserved of its kind in India. Bīrbal's house has received some special structural repairs, and the King's stables are gaining greatly in appearance by the demolition of modern rubble supports and the renovation of broken or damaged members. Some further expenditure also has been incurred upon repaving the Khāṣṣ Maḥall and Jodh Bāī's palace and cleansing the old diving well outside the Jāmi' Masjid. But the chief enterprise of the year has been the rebuilding of portions of the outer walls and gateways of the city—a work which will round off, so to speak, all that has been done during the last quarter of the century within the palace precincts.

In the Punjab we are, as I stated above, only on the threshhold of our conservation work, and our first thoughts have naturally been for those buildings which have already reached a stage of decay when any procrastination in protecting them would have been dangerous. In such a state was the gateway of the Khairu-l-Manāzil at Delhi—the only portion of that structure that could be saved,— and in such state the tombs of Jahāngīr's Empress Nūr Jahān, of Āsaf Khān, her brother, and of Tagah Khān, the foster-father of Akbar; the last a fabric of unpretentious size, but in point of harmony and delicacy of workmanship unsurpassed by anything in the Punjab. This is the only one, unfortunately, of the three which can be brought back to any semblance of its former beauty, the other two being long since past repair. Simultaneously with the above, extensive repairs have also been carried out at several of the more famous masterpieces of Saracenic architecture, which, though not actually precarious, were yet in a sorry state of disrepair. Among these were Jahāngīr's mausoleum at Shāhdara, where a beginning was made with the repair of the western façade and of the pavements of the roof and cloisters; the tile-enamelled masjid of Wazīr Khān at Lahor; and the bijou Pearl Mosque of white marble in the Delhi Fort, which would now challenge comparison with any of the most perfectly preserved monuments of the country. At Humāyūn's tomb attention was mainly directed to reclaiming the garden from the wilderness which had overspread it, the tomb itself being one of the few buildings in the Punjab that have been consistently well cared for. A considerable sum of money was expended here in excavating and repairing the ancient tanks and channels and relevelling the ground preparatory to its being planted and turfed.

As might have been expected, much of the initial work among these monuments has lain in rescuing them from the utilitarian purposes to which they have been put, and in effacing the evidences of their modernization. Particularly has this been the case in the Mughal Forts at Delhi and Lahor, where British Military occupation was largely responsible for the abuses perpetrated on the old royal palaces. In the Fort at Lahor the beautiful Motī Masjid of Jahāngīr and the Sleeping Hall of Shāh Jahān have both been recovered in this way—the one from entombment in the massive brick-work of a Government treasury, the other from a scarcely less improper, albeit less ignoble, use as a church for British troops. In the Delhi Fort three of the palace

edifices—the Naqqār Khāna, the Rang Maḥall and the Shāh Burj—have been reclaimed from the military, and are now waiting repair; and in several other buildings excavation has brought to light marble tanks, cascades and fountains, which were filled up and hidden from view years ago. Another monument—having no connection with either of the Forts—that has been a victim of modern vandalism, and that is now being restored as nearly as possible to its former state, is the mosque of Dāī Anga at Lahor. For some of the accretions that have enveloped this structure the Sikhs appear to have been responsible, but its real transformation dates from the time when it was converted into a railway office, and it was then that most of the damage was done to its enamelled walls. Finally, I must mention in this category the tomb of 'Isā Khān near Delhi, round which used to cluster a whole village of squalid huts, choking the precincts of the tomb and rendering it inaccessible to visitors. This village has now been swept bodily away, and in its place a peaceful garden, walled off from the outer world, makes a worthy setting to so fine a tomb.

When we pass from these Mughal monuments to the other great Saracenic groups in Eastern, Western and Central India, where conservation work has been going on, we are taking a step or two back in the history of architecture. The monuments at Gaur and Panduah in Bengal, at Bījāpur and Ahmadābād in Bombay, and at Dhār and Māṇḍū in Central India are the immediate precursors of the Mughal architecture of the north, towards the evolution of which they all contributed in varying degrees. Each and every one of these groups—and several more besides, which do not claim attention here—derived their style from one common parentage; each was developed on independent soil and marked by a strong individuality of its own, and in each case this individuality passed away under the absorbing influences of the Mughal Empire. Their birth, their existence and their decay are indissolubly bound up with the political history of the several dynasties which called them into existence, and they reflect for us with unmistakable clearness the vicissitudes through which those dynasties passed.

The monuments under repair at Gaur and Panduah and the general scheme of work going on there were described by Dr. Bloch at some length in the Annual for 1902-03. Since then no new enterprise has been taken up, but considerable progress has been made in the repairs at the Ādīna Masjid at Panduah, at the Bāradwārī at Rāmkel, and at the Dākhil Darwāza and the Lattan Masjid at Gaur. With one or two notable exceptions, all the monuments in this group were built entirely of brick, faced, it may be, with enamel tiles or ornaments of terra cotta, and the nature of these materials as well as the style of their designs gives them a unique position among Indian buildings. It is fortunate, indeed, for other monuments that this is so, for the character of these Bengal structures renders their repair a matter of exceptional difficulty. Restoration on the scale on which it has been carried out among the Mughal monuments is, of course, impracticable, and would in any case be unjustifiable in the present condition of these buildings. On the other hand, merely superficial measures are unavailing where heavy masses of brickwork are already tottering with decay or torn asunder by destructive jungle roots. In such cases, only partial dismantling and rebuilding will effect a radical cure, and, unhappily, this course sometimes involves interference with the delicately carved reliefs of the façades, many of

which have reached that state of disintegration when they can only be removed and replaced at the risk of falling to pieces.

Bījāpur and Ahmadābād are better off in every way than the Bengal sites. Apart from the greater natural stability of their structures, they have both been judiciously tended by the Government for some years past, and, though the expenditure upon them has not been lavish, their conservation is now, for the most part, a mere matter of ordinary annual repairs. The same remark, let me add parenthetically, applies to the majority of better known monuments in the Presidency, whether Muhammadan, Hindu, Jaina, or Buddhist. Thus the total outlay upon the two groups at Bījāpur and Ahmadābād amounted during the past year to less than R24,000, including over R12,000 from Imperial funds, and this sum was divided over thirty odd buildings, among those which absorbed the largest amounts being the Ibrāhīm Rauza, the Gol Gumbaz, and Mehtarī Maḥall at Bījāpur, and Sīdī Basīr's mosque and tomb, Bābā Lului's masjid, Achyut Bībī's mosque and tomb and the Khanjan mosque at Ahmadābād.

It follows, of course, from the careful limits set to expenditure in the past that the programme of work had to be restricted to securing the structural safety of these buildings, without any attempts being made to efface the disfigurements which their beauty had sustained through age or ill-treatment. Bījāpur affords conspicuous examples of monuments whose grandeur is seriously impaired by the loss or mutilation of some prominent decorative feature. The great Gol Gumbaz, for instance,—a building in other respects exceptionally well preserved—loses much of its impressiveness through the ragged and unsightly condition of its deep cornice. It is the same with the Ibrāhīm Rauza and the Jāmi' Masjid. These cornices are now to be restored, and the work upon the Gol Gumbaz has already begun. In each case the massiveness of the cornice, their great height from the ground, and the richness of the carvings lavished on the huge brackets makes the task an exceptionally difficult and expensive one. Probably it will extend over some half a dozen years, but the results will more than compensate us for the trouble taken.

In Dhār and Māṇḍū we are no longer in British territory, and a word or two of explanation seems called for as to the share taken by the Government of India in the extensive works that have been going on there. It is natural, of course, that the monuments in British India should have the first claim upon the attention of Government, and it is only in exceptional cases, where the monuments in Native States are of more than local interest and where the resources of the Darbār concerned are insufficient for their repair, that subsidies for the purpose can be spared by the Imperial Government. Such a case, pre-eminently, was the one of which we are speaking. The monuments at Dhār and Māṇḍū are essentially of national interest; they are Imperial in character as well as in origin. But the State, in which chance has placed them, is one of the smallest in the Central India Agency, with correspondingly small revenues, which have been unusually depleted during recent years. The Government accordingly came forward and undertook to bear the initial cost of repairs at Māṇḍu, on the understanding that the Darbār would make provision for those at Dhār, and pledge itself afterwards to keep up the monuments in both places, besides making them more accessible to visitors. So far this arrangement has worked

admirably. A full account of the operations will be found in a special contribution by the Political Agent, Captain E. Barnes, to whom, I should like to remark, much of the success which has attended them is directly due. At Māṇḍū, some fifteen buildings in all have up to the present come under repair, but attention has been mainly concentrated upon five. Of the unearthing of the Khaljī mausoleum and the discovery of the Tower of Victory I gave a short account by anticipation in last year's Annual, and from Captain Barnes' description it will be seen that the further progress of exploration has served to confirm the identification of these structures which was first put forward. The transformation of the Hindola Mahall is particularly striking, now that the later edifice built on to its southern façade has been dismantled, its plinth laid bare, and the rooms at its northern end opened up. Another new feature, too, in the shape of a large ornamental tank, has been revealed by the removal of débris at the Jahāz Mahall. The task of conserving the other two monuments, *viz.*, the Jāmi' Masjid and Hūshang's tomb, involved by far the most extended operations in Māṇḍū, and in the case of Hūshang's tomb it will in all likelihood take two more years to complete. It is for this reason that illustrations of the work have been reserved for a future Report.

At Dhār, the Darbār has been busy with the repairs of the Lāṭ Masjid, which have been carried through with signally good results, particularly in the matter of harmonizing the new work with the old. The inscribed slabs, also, to which I referred last year, have now been extracted from the *miḥrāb* in the Kamāl Maulā mosque and a summary of their contents, kindly contributed by Professors Hultzsch and Pischel, is published in the epigraphical section of this Report. The inscriptions are being edited *in extenso* by Professor Hultzsch in the *Epigraphia Indica*. It should be added, too, that one of the less important edifices at Māṇḍū has been converted at the expense of the State into a comfortable *dāk* bungalow, and the journey there has been much facilitated by the institution of a regular motor car service to Dhār from the nearest railway station at Mhow.

All the buildings of which I have so far been speaking are in the foremost rank of Muhammadan monuments; they belong to large and famous groups, each of which is undergoing a systematic scheme of conservation, and it is natural, therefore, that they should be the first to claim our notice. But they are far from exhausting the year's record of work amid Saracenic architecture. There have been many other miscellaneous undertakings—some of them on a less extended scale, and some among monuments of less note. The long series of works, for example, in the Rohtāsgaṛh Fort—a provincial stronghold of the Mughal days—which were described in a previous Report, have been practically brought to completion; repairs have been done to the colonnades of the majestic mosque of Altamsh at the Quṭb; the shrine of Sayyid Salar Mas'ūd at Bahraich has been largely rebuilt; and the Jāmi' Masjid at Lucknow renovated. To this list let me also add the Rauza at Wātwa, the Jāmi' Masjids at Burhānpur and Etawah, and another mosque at Rohinkhed, as monuments whose repair has been achieved at more than ordinary cost and trouble.

Let us turn now to the Hindu, Jaina and Buddhist monuments. I stated a year ago that, thanks to the liberality of the present Local Government, Archæology in

the South of India was entering upon a new era, and that we might look forward to a systematic policy of conservation being pursued throughout the Presidency for some years to come. An active beginning has now been made in the programme, and several famous sites are undergoing regeneration. As might be expected after years of neglect and particularly amid the tropical luxuriance of Madras, much of the initial work has consisted in rescuing the buildings from the exuberant vegetation in which they were enveloped, and in opening up convenient approaches to them. Especially has this been the case at Conjeeveram, Vijayanagar, Tanjore and the Gandikota temple. The site of Vijayanagar absorbed by far the largest share of money during the year, but the ruins there are so extensive and so effectually overgrown, that after clearing them from jungle, removing débris, and making such new roads as were necessary, time could only be found for the actual repair of a few of the most precarious structures, among which may be mentioned the Kṛṣṇasvāmi, Gaṇeśa, and Hazāra Rāmasvāmi temples. To the repairs of the Chennakeśavasvāmi temple at Soṁpalle a special contribution was devoted in last year's Report, but the work not being finished at that time, no illustrations accompanied the description. These are accordingly published on Plate XXVI and fig. 1, p. 69 of the present Annual. Other monuments in the Presidency that have been brought into the programme of conservation are the Viṣṇu and Śiva temples at Tāḍpatri; the Jalakaṇṭheśvarasvāmi shrine at Vellore; the Aśoka edict in the Ganjam district; a tank at Vālikoṇḍāpuram; and two rock-hewn shrines in the Fort Rock at Trichinopoly. For an account of these several undertakings the reader must be referred to the separate article on the subject, but I should like here to draw especial attention to the two interesting shrines which have been unmasked in the Trichinopoly Rock. Both caves had long ago been walled up and converted into godowns for the temple above, so that although they were known to Archæologists, the average visitor to the Rock Fort was totally unaware of their existence. Opened as they now are to view, with new inscriptions and sculptured panels brought to light, they should add appreciably to the attractions of the Rock.

In Bengal, the conservation of the Mukteśvara temple and group of shrines connected with it at Bhubaneśvar in Orissa has been pushed forward, and in the same district the laborious work of filling up the vast interior of the temple of the Sun God at Konarak has been completed. How arduous this work has proved may be gauged from the fact that the crowning stone *kalaśa* of the temple, through which a hole had to be drilled, is 25 feet in thickness and is estimated to weigh not less than 2,000 tons. An important discovery of the year in connection with this famous structure is that about one-third of the spire still exists beneath the great heap of débris to the west of the *maṇḍapa*. The upper portion of the spire has already been laid bare, and there is every reason to hope that the rest of it will be found comparatively intact. Other conservation measures in the Bengal Circle have been concerned with the Budh-Gayā temple, the palace and temples of the Ahom kings in Assam, and some shrines, dating roughly from the 17th century, at Vishnupur in the Bankura district—the last-mentioned comprising some of the best examples of the peculiar Bengali style of temple architecture, which may have been developed to some extent under Muhammadan influences.

The remarks which I made about Muhammadan buildings in the Bombay Presidency apply equally to the Hindu. There is nothing whatever to record of an exceptional nature in the conservation of any of them, unless it be the increased attention that has been paid to the various rock-cut caves at Elephanta, Kānheri, Kondivte, Kārle and some other places in the Poona and Sātāra districts. In Berar, in proportion as little had been done in the past, the conservation of many of the monuments was a more formidable matter, and several items, notably the repair of the temples at Sātgāon, Dhotra, Lonār, Sākegāon and Mehkar, involved a considerable outlay. The Central Provinces, which are included in the same circle, are less fortunate, in that little has yet been done to make up for the neglect which they suffered in the past. Of the few works in course of execution there, and of the much larger number still awaiting it, Mr. Cousens gives a sketch in a separate article printed below, and I need only stop to notice the re-roofing of the old Siddheśvara temple at Māndhātā. For the rest, scarcity of local funds has prevented their being taken in hand.

In Northern India there are comparatively few ancient Hindu monuments. Those of a pre-Muhammadan date survive only in the remoter districts, where they were not exposed to the destructiveness of the Moslem invaders, and in later days—that is to say, until the decay of the Mughal power—there was singularly little chance of such monuments being erected except under the enlightened and tolerant rule of Akbar and his immediate successors. To this period belong the temples of Govind Dev, Jugal Kiśor and Rādhā Ballabh at Bindrāban. The first mentioned has been carefully tended for many years past, but the other two have only recently come into the charge of Government, and much labour is being bestowed upon rescuing them from the decay which had overtaken them. The work upon the Jugal Kiśor temple, which consisted in refitting or renewing much of the loose and damaged facing of the *śikhara* and other parts of the structure, has been fully carried out, but the temple of Rādhā Ballabh, which, by the way, is a peculiarly interesting example of the eclectic style of the period, is still in the repairer's hands, and a full account of both these undertakings is therefore reserved for a future Report.

A third large class of monuments upon which much care is being expended by the Survey are those of Burma. Though doubtless owing much in their development to the influences of the Hindu and Buddhist architecture of India, their style both in the earliest and latest phases in which we know it, is characterised by an originality, which at once combines them into a distinct and closely affined group, and isolates them from the monuments of India proper. Strictly speaking, the most recent among them, which date only from the last generation, ought not to find a place in an Archæological Report. Their modernity should properly preclude them. But inasmuch as the Survey is equally responsible for these as for the more ancient examples, it is reasonable to record among its other activities the steps that have been taken for their conservation.

Perhaps the most important feature of the year's work has been the mapping out of a methodical and more extended scheme for future operations. The Archæological Department in Burma being but a recent creation and not having had time to take proper stock of the monuments of the country, conservation was until the past year

restricted almost exclusively to a few of the best known structures at Mandalay and Pagan. Some irregular lists of antiquities were, it is true, compiled as far back as 1883 by Dr. Forchhammer, but they contained no information as to the actual condition of the monuments or the measures necessary for their safety. Accordingly, a careful examination has now been made of one and all the edifices at Pegu, Mandalay, Sagaing, Shwebo, Pagan and several other places, and a programme of repair drawn out which is to be put into execution at once. In the meantime good progress has been made with such works as were already in hand. At Mandalay, the reconstruction of the missing *pyatthats* on the walls of Fort Dufferin, as well as the repair of others that were in a dilapidated condition, has been completed; various improvements have been effected in the Palace Buildings; and the Queen's Monastery in A Road—the most attractive perhaps of all the buildings there—has been rescued from a state of much neglect. At Pagan the preliminary work begun last year at the Manuha, Gawdawpalin, Thatbinnyu, Shwekugyi and Ananda Pagodas has been followed up by more thorough measures, and all these buildings are now in good repair. A fair beginning, it should be added, has also been made in the construction of the Museum at Pagan.

In conclusion it remains to record what has been done to discharge the long neglected duty of preserving or commemorating the many historic memorials connected with the British in India. These memorials stand in a class apart from all others, and a class which, until Lord Curzon's advent, was more completely neglected than any other. It is, indeed, a remarkable feature of the indifference with which the monuments of the past have been systematically treated by the British that even the buildings which witnessed some of the noblest and most tragic events in their history, the battlefields where their ancestors fought and conquered, and the residences of illustrious men, who by their swords, their counsels and their pens made the name of England great and famous, have gone uncommemorated and uncared for. The preservation of these memorials and the perpetuation of the records they contain has been an especial care to the Viceroy. Of the repairs to the famous mutiny monuments at Lucknow—the Residency, the Dilkus̲h̲ā Palace, and the Sikandar Bāg̲h̲—I gave a sufficiently full description last year, and I need not dwell upon them again, though it may be remarked in passing that the most scrupulous care is being taken to preserve their old and battered appearance. To a much earlier epoch belongs the part which the old Fort William in Calcutta played in the annals of British history. Unfortunately, little of this once famous structure has survived to our times except its buried foundations, but by the aid of careful excavations and measurements, added to the information obtainable from old plans and drawings, it has been possible not only to determine accurately the position of its walls and bastions, but to fix down the exact site of the other main features of the Fort, including the Black Hole prison, in which was enacted the terrible tragedy of the 20th June, 1756.

Each of these sites has been sedulously marked and commemorated. Whereever the outer or inner line of the curtain and bastions had not been built over, they have been traced on the ground with brass lines let into stone, while white marble tablets have been inserted in the walls of the adjoining buildings with inscriptions stating what part of the old building originally stood there. The site of the prison, too, has been

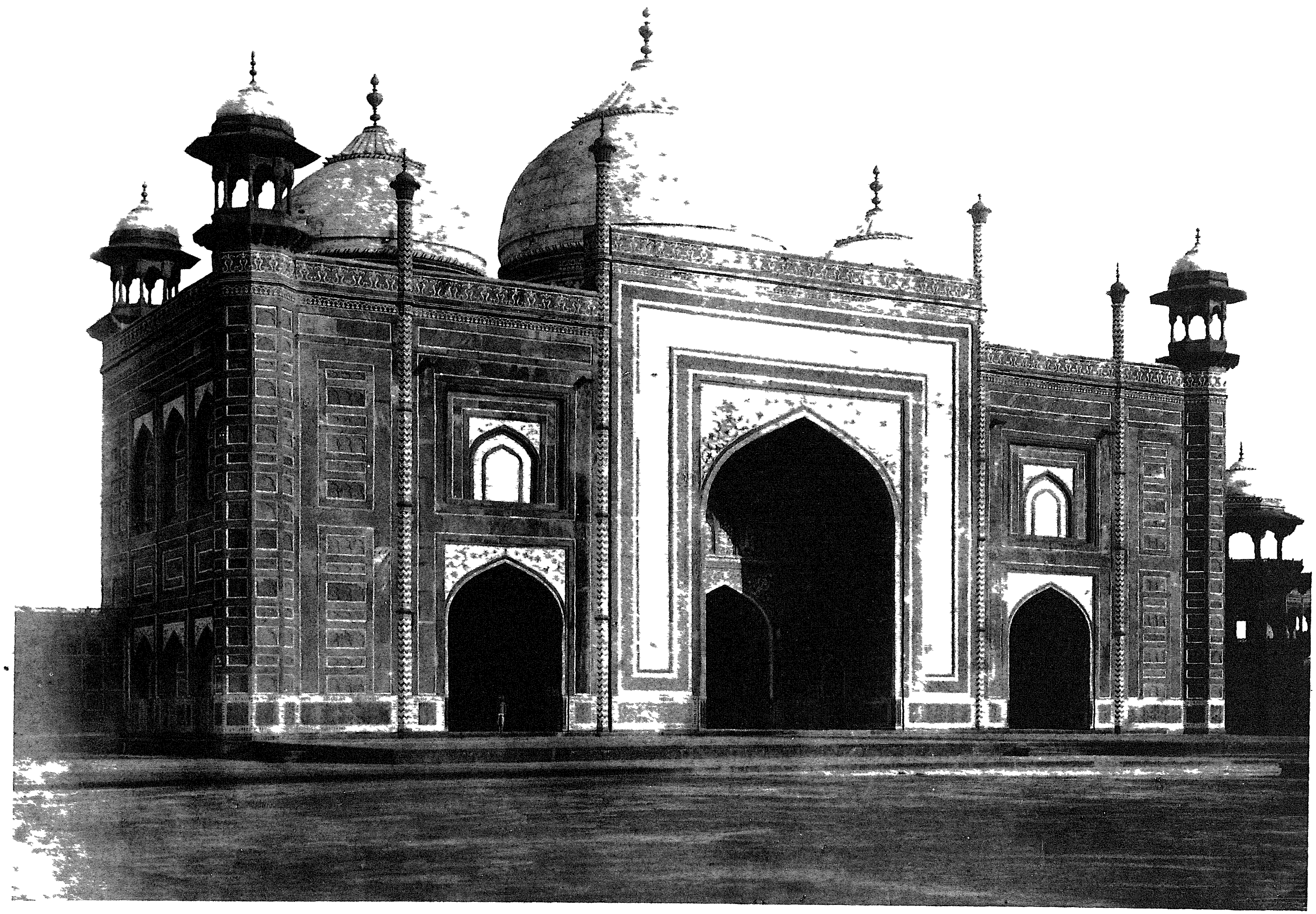
covered with polished black marble surrounded with a neat iron railing, and a tablet has been placed on the wall above to explain the memorable and historic nature of the spot below; finally, a white marble replica of the obelisk originally set up by Holwell over the grave of the sufferers, but which was demolished in 1821, has been re-erected and presented to Calcutta by Lord Curzon. The records inscribed on the new obelisk, it may be noted, differ in two material points from those on the original memorial. The reason for these changes is explained in the following extract from Lord Curzon's speech delivered on the occasion of the unveiling of the obelisk: "Holwell's inscriptions written by himself, with the memory of that awful experience still fresh in his mind, contained a bitter reference to the personal responsibility for the tragedy of Sirāj u-d-Daula, which, I think, is not wholly justified by our fuller knowledge of the facts, gathered from a great variety of sources, and which I have therefore struck out as calculated to keep alive feelings that we would all wish to see die. Further, though Holwell's record contained less than fifty names out of the 123 who had been suffocated in the Black Hole, I have by means of careful search into the records, both here and in England, recovered not only the Christian names of the whole of those persons, but also more than twenty fresh names of those who also died in the prison. So that the new monument records the names of no fewer than sixty of the victims of that terrible night."

These efforts to perpetuate the surviving records of a past that is every day tending to disappear more and more from the public recollection have extended to numerous other sites and buildings in various parts of India. Memorials have been set up on the historic battlefields of Mudkī, Fīroz Shah, Sobrāon, and several other places, while the monument, which celebrates the fight at Plassey, is being removed from its old site and re-erected in a more worthy form and more appropriate position Commemorative medallions, too, have been placed on more than 130 houses, which are notable for their historical associations, or in which distinguished public men, whether European or Indian, have dwelt. Such, to pick out a few examples, are the residences of Lord Clive, of the Duke of Wellington, of Warren Hastings and of Lord Macaulay, of Mīr Ja'far, of the Mahārāja Nando Kumār, and of Rājā Chait Singh; the factories of early English and Portuguese settlers; the house where Śivajī, the founder of the Mahrātta confederacy, was born, and another where Tulsī Dās, the poet and religious reformer, is said to have composed his hymns; the court house of Gerald Aungier, Governor of Bombay in the 17th century; and the building at Arrah where the memorable defence was made against the mutineers in 1857.

J. H. MARSHALL.

PLATE I

THE TAJ GENERAL VIEW OF THE JAWĀB



CONSERVATION OF MUHAMMADAN MONUMENTS IN THE UNITED PROVINCES AND PUNJAB.

IT will be convenient to classify the buildings which come under notice in this Article according to their several localities. Agra, Delhi and Lahore, and then some places of minor importance where work has been done, will each be visited in turn. Agra naturally comes first because it is, from the point of view of Muhammadan architecture, quite the richest of all centres in these Provinces, and in fact in India. Not only is there more to see in and about Agra than elsewhere, but what there is, is of exceptional beauty. In this district we have the master-pieces of the two greatest builders among Mug͟hal Emperors. Fatḥpūr Sīkrī possesses a whole city complete with palaces, mosques and public offices, all built by Akbar; while Agra, with its glorious Tāj and marble palaces of S͟hāh Jahān, can boast of treasures unrivalled in the Orient.

The Tāj Maḥall.

The Tāj claims the distinction of having been one of the earliest of Indian monuments to be repaired at the hands of the British. It was first taken in hand as far back as 1810, under the supervision of a certain Lieutenant Taylor, and much valuable work appears to have been done by him; but the repairs both then and for many years afterwards were limited to the main buildings, there being no thought of rescuing from decay the subsidiary structures grouped around. Indeed it is only within the last five years or so that a sustained effort has been made to take these latter systematically in hand and overhaul them one by one. So far as the larger buildings within the garden of the Tāj are concerned, this work is now complete—the last of them to be taken up being the *Jawāb*, which has gone through the same transformation during the past year as its counterpart—the mosque—did in the two preceding years. Of the general design of the *Jawāb* it is unnecessary to speak; its beauty has seldom failed to impress those who have been fortunate enough to see it, notwithstanding the immediate proximity of the more imposing mausoleum. But few, I think, have realised what an important part it plays, along with the mosque, in the composition of the whole group of buildings. The *Jawāb* was probably used as a place for holding receptions on the occasion of anniversaries, and it is referred to by the court

chronicler of the Emperor Shāh Jahān as the *mihmān khānah*, or "guest-house."[1] The same writer points out that "it is in all respects like its complement the mosque, except that its wall has no *mihrāb*,[2] and its floor is not divided into spaces for worshippers."

The work recently executed consists mainly in the restoration of some carved sand-stone panels, and marble inlay in the zig-zag border round the dado on the west front and in the frieze at the base of the domes. The carved panels bear delicate floral patterns in relief, but many of them had perished to such an extent as to be scarcely recognizable, while others had already been clumsily restored by patching them with plain slabs and irregularly shaped pieces of stone. The restoration of the marble inlay in the frieze at the base of the domes is an expensive item, and consequently those portions only which are visible from within the Tāj enclosure were undertaken this year. The frieze is of red sand-stone, upon which was chased and inlaid a conventional floral design, the darker pieces of the inlay being composed of yellow, and the remainder of white marble.

Besides the work done to the *Jawāb*, further improvements have been carried out in the garden. In particular, many of the ornamental battlements inlaid with black and white marble have been restored. Altogether, about 300 of the white marble flowers, and 600 lineal feet of the white marble band have been renewed. In fixing these inlaid flowers it was found that, however well a piece was fitted, and however good the mortar, almost any piece could be picked out by working round the joint with the point of a pen-knife, so, in order to make the work quite sound, the engineer adopted the plan of securing each flower by two small copper pins.

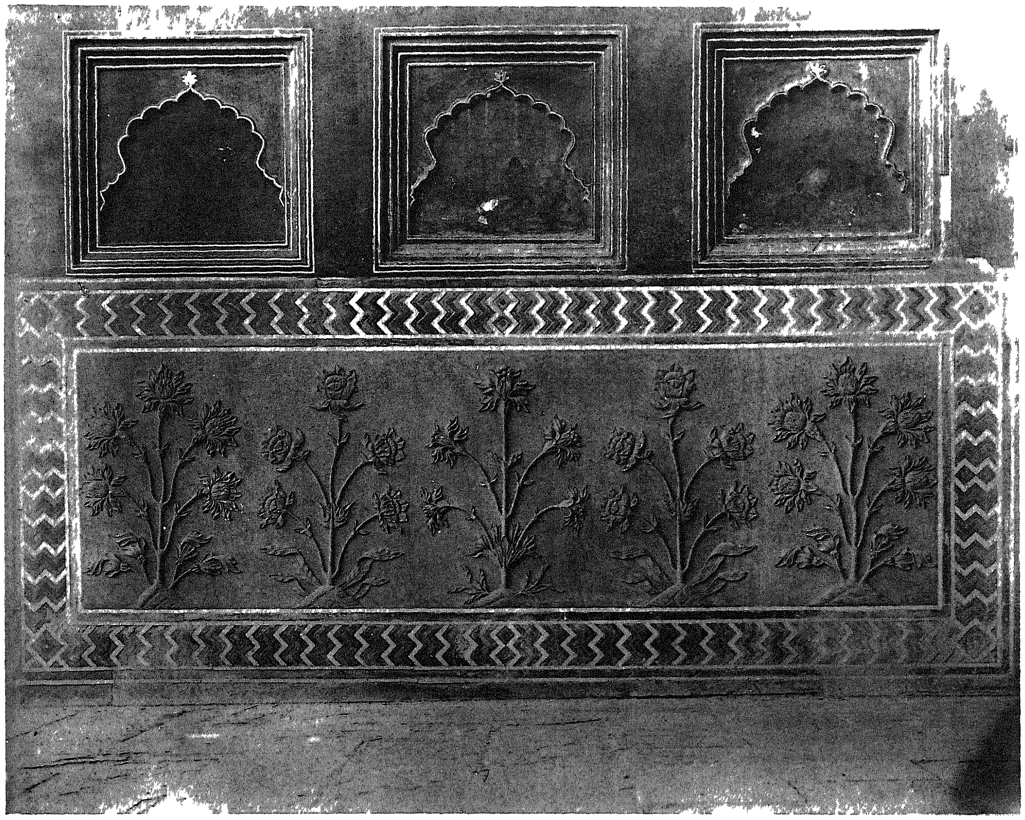
Another improvement has been the cutting down of some of the heavier trees in the garden, so as to open up a fuller view of the buildings round the mausoleum from the main gateway. Until the present year it was hardly possible to get a grasp of the general design, for both the mosque and the *Jawāb* were hidden behind dense foliage. Much still remains to be done to the gardens, but their laying out can only go on very gradually. For any sudden and sweeping changes would mean that the pleasure taken in the gardens by the present generation would have to be sacrificed for the sake of the next; and few would be disposed to consider such a sacrifice justified.

Scarcely any one either on entering or leaving the Tāj visits the Sahelī Burjs, though in any other place, where they were not overshadowed by its beauty, they might well attract attention. There are four Sahelī Burjs altogether, all of them erected in memory of maids-of-honour in the service of the Empress. Two of these have recently come under repair. The most striking changes are those in the first Sahelī Burj, which stands on the right hand side as one enters the precincts of the Tāj from the west. Here the compound has been converted from a veritable wilderness into a neatly paved and well grassed garden. A photograph showing its condition after repair is given on Plate III. As part of the scheme of restoration, the fountain in the central tank has been connected with the Tāj irrigation main. The tank, too, and the water-channels which it feeds have been restored.

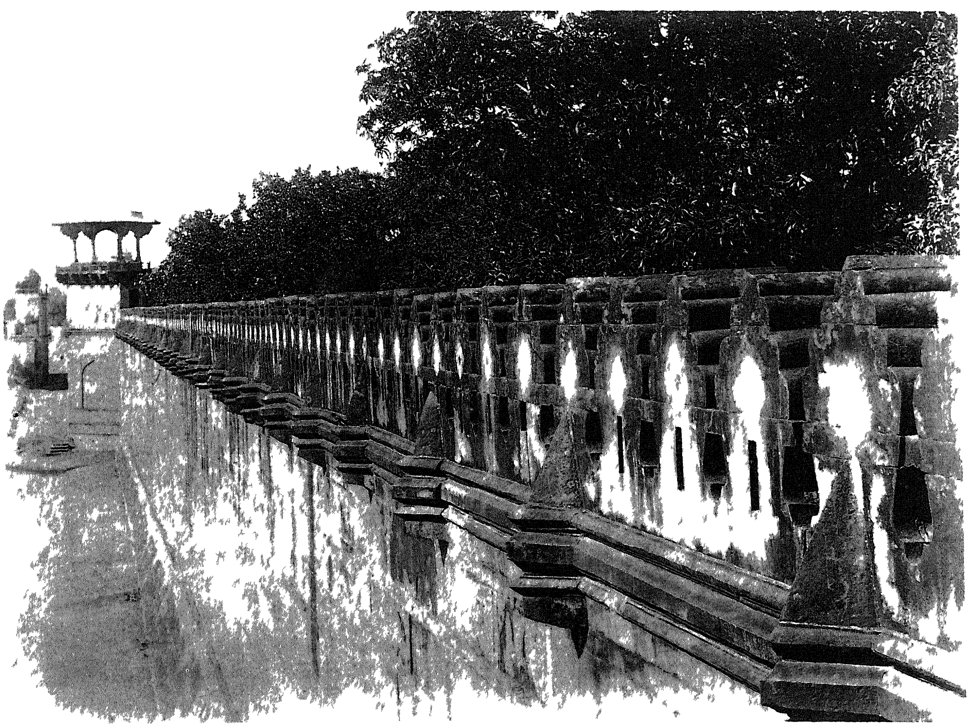
A new feature that has been added to the attractions of the Tāj is a small

[1] *Bādshāh Nāmah*, Bibl. Ind, Vol. II., 327.

[2] A recess formed in the west wall of mosques.



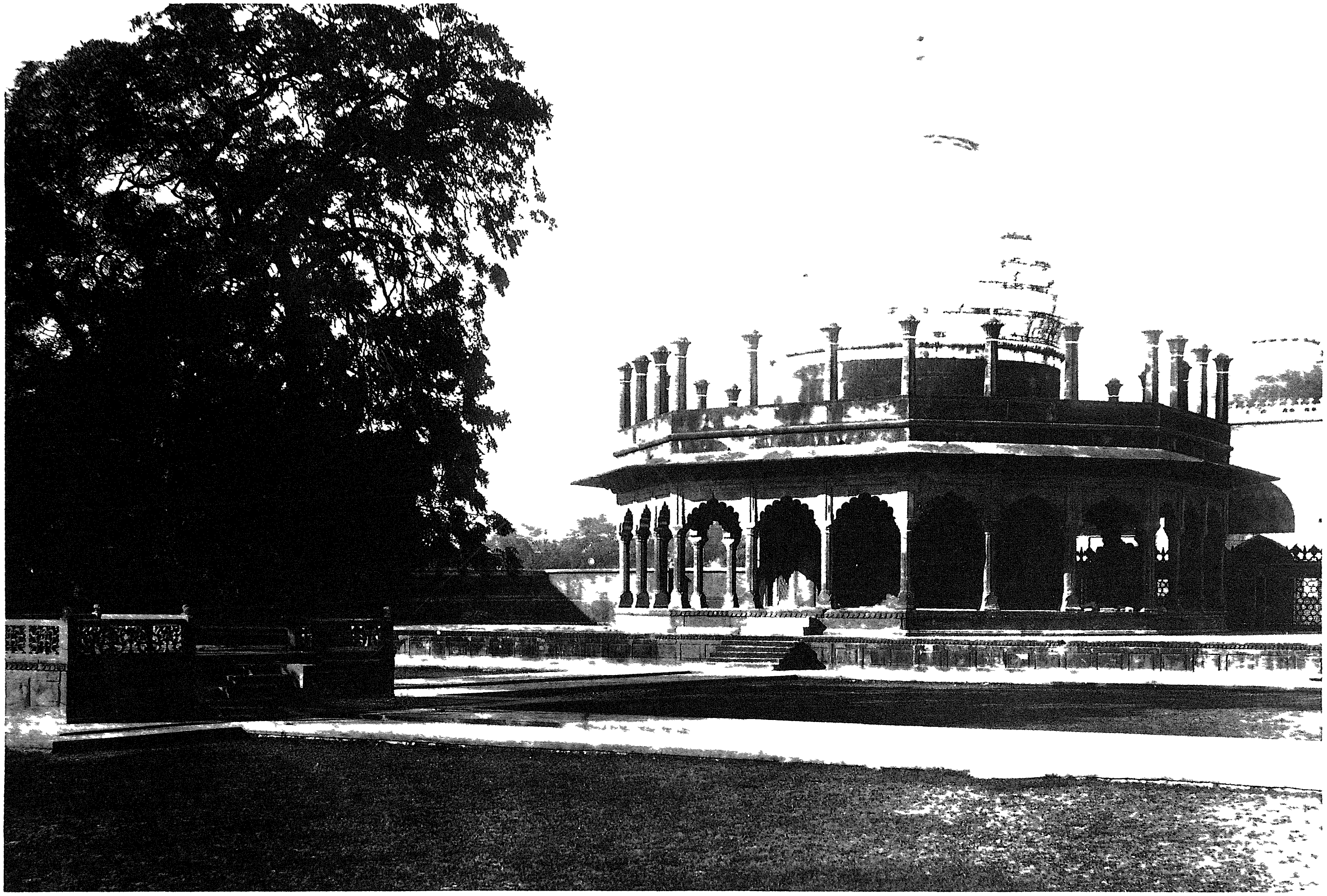
b



(a) A PANEL IN THE DADO OF THE JAWĀB AFTER RESTORATION.
(b) BATTLEMENTS OF THE GARDEN WALL AFTER RESTORATION.

PLATE III.

THE TĀJ SAHELĪ BURJ I.



AFTER RESTORATION

museum, located in the south gateway, which is intended to illustrate its building and subsequent history. Among other objects of interest which this museum already contains, are several old plans of the mausoleum and a series of photographs showing the many and various phases through which the gardens have passed in the course of the last forty years. A collection, too, has been made of the many kinds of stones used in the construction and ornamentation of the edifices, among which may be noticed a piece of *pāzahr* stone weighing 78 lbs. This stone was found last year between the west wall of the Tāj garden and the Khān-i-'Ālam Bāgh. For some time previously it had been observed that the residents of Tājganj were in the habit of picking up pieces of semi-precious stone which came to the surface here in the rains, and, on excavations being made, some large pieces of stone, mostly of the *pāzahr* variety, were found. The story is that, when the Tāj was built, the inlay-workers' sheds were located there.

Before leaving the Tāj it may be noticed how much the appearance of the quadrangle has been enhanced by the lowering and metalling of the roads and construction of covered drains. In the old days the quadrangle used to be deep in dust in the dry weather, and flooded with water during the rains. Now dust and water have alike disappeared. In the roadway through the west entrance gateway, which is the principal entrance to the Tāj, the removal of the metalling which had accumulated to a depth of about eighteen inches involved the regrading of the approach to the gateway, outside as well as inside the quadrangle, and this led to the discovery of an ancient brick pavement. It was not, however, considered advisable to leave the latter exposed, as the slope is too great and does not work in with that of the approach road. A further result of these changes in the levels, it should be noticed, is that the old gates have been saved from the decay which was gradually creeping up as they became more and more imbedded in road metal and dirt.

There is a well-known tradition, recorded by Tavernier,[1] that Shāh Jahān intended to erect another mausoleum for himself on the further bank of the Jumna, immediately opposite the Tāj. This second mausoleum was to have been the counterpart of the Tāj, but built in black instead of white marble, and the two buildings were to have been connected by a bridge across the river. This scheme of Shāh Jahān's was thwarted by his son Aurangzeb; but the site selected is said to have been the Mahtāb Bāgh—a garden which dates back probably to the time of Bābar, though it now survives only in a ruined wall along the river front. This wall, ending at the downstream end in a small tower surmounted by a kiosk, forms a conspicuous and pleasing feature in the view from the Tāj, and for this reason as well as the associations connected with it, was thought worthy of structural repair. Whether the story recorded by Tavernier is based upon fact or not, cannot be definitely ascertained, but it is worth noting that the tomb of Tāj Maḥall occupies the centre of the mortuary chamber in the Tāj mausoleum, and this would hardly have been the case if Shāh Jahān had intended that his own body should be placed in the same chamber.

A little to the west of the Mahtāb Bāgh, in the village of Kachpura, lies the *masjid* of Humāyūn, which has lately had some minor repairs done to it. This mosque has been described by General Cunningham's assistant,[2] who mentions an

[1] Tavernier. *Travels in India* (Macmillan & Co., London), Vol. I, Book 1, Chapter VII.
[2] A. S. R. (C. S.), Vol. IV, p. 100.

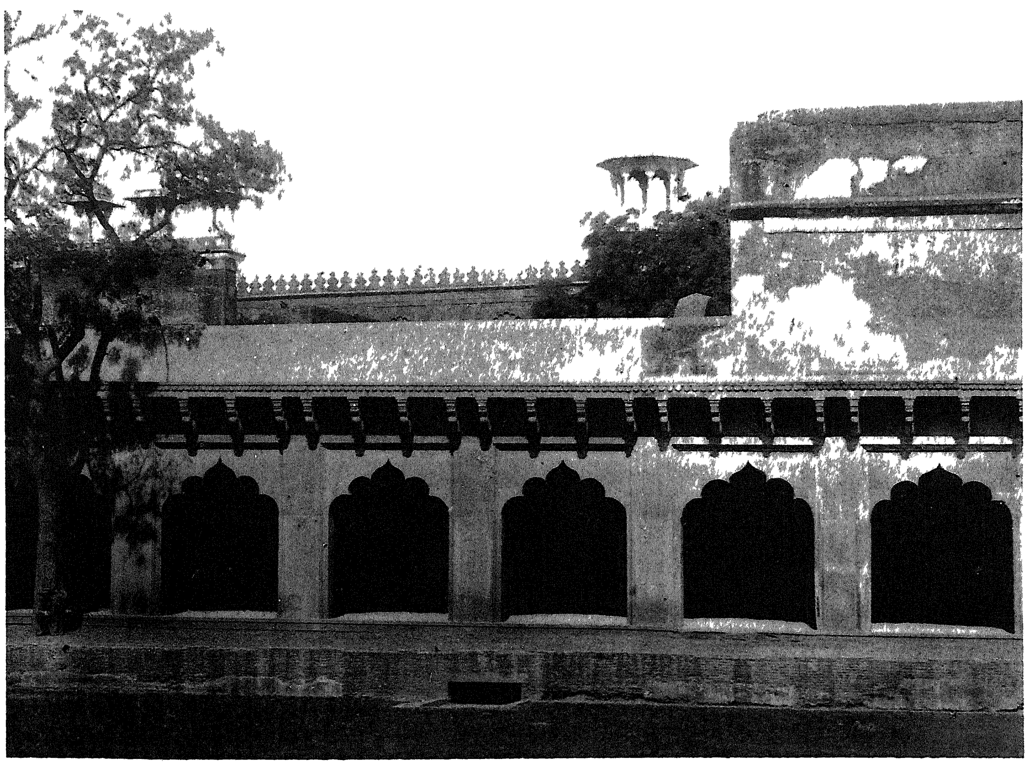
inscription in the central chamber recording that "the auspicious floor and roof were built by the powerful decree and command of Muḥammad Humāyūn", and giving the date of its completion as A.H. 937 (A.D. 1530).

The Fort.

The most striking changes which have been effected in the Fort, are those concerned with the quadrangle of the Dīwān-i-'Āmm. The previous number of this Annual describes the beginning of the transformation that is going on and the changes already achieved in the eastern portion of the quadrangle. The west side is now being treated in a similar fashion, and the whole undertaking should be completed in the course of another year. The brick pavement, it should be noticed, which was discovered in the previous year leading from the Mīnā Bāzār, has now been traced as far as the north gateway of the quadrangle, and has been left exposed. The cloisters also have been restored across the gap which existed in the north wall of the quadrangle, and through which for many years the main road passed. This gap was probably made for the convenience of traffic in the days when the quadrangle was used as an arsenal yard, in order to avoid the sharp turns and narrow archways at the ancient entrance. That the cloisters were originally continuous across the gap was quite clear from the existence of the foundations of the walls, and the improvement in the appearance of the quadrangle which has resulted from their restoration may be gathered from the illustrations on Plate IV.

Within the Hall of Audience itself some work has had to be done in repairing some of the plastered columns and part of the roof. There is no doubt that the columns were originally plastered, since the sand-stone cores are quite rough, but their appearance was not considered sufficiently attractive in 1875 for the great Darbār, which was held during the visit of the Prince of Wales. On that occasion the original plaster was coated over, and the gold and red lines, with which it was decorated, were retouched. Judging from the logs of wood and bamboos found imbedded in the heavy mouldings of the cornice these repairs appear to have been hurriedly done; the red lining in particular is coarse in comparison with the old Some years later the mistake was made of cleaning off all the plaster from two of the bays under the impression that it was entirely modern. There were thus three possible ways of dealing with these disfigurements:— first, to leave the Hall just as it was, in which case the columns stripped of plaster would have remained a painfully discordant feature; secondly, to restore the columns again as they had been restored in 1875, in which case the restoration would have been a copy of a faulty modern work; and thirdly, to restore the plaster and decoration to their original form. After weighing the matter thoroughly the third solution was decided upon. It is true that the contrast between the work of 1875 and the new work is for the moment noticeable, and it is true, also, that there will always be a discrepancy between the two in the matter of their decoration, but there is every prospect that when the gold and red lining on the new work is finished, and a few years have passed over it, the difference will not be obtrusive, and we shall at least have the satisfaction of knowing that the new work is scrupulously true to the original.



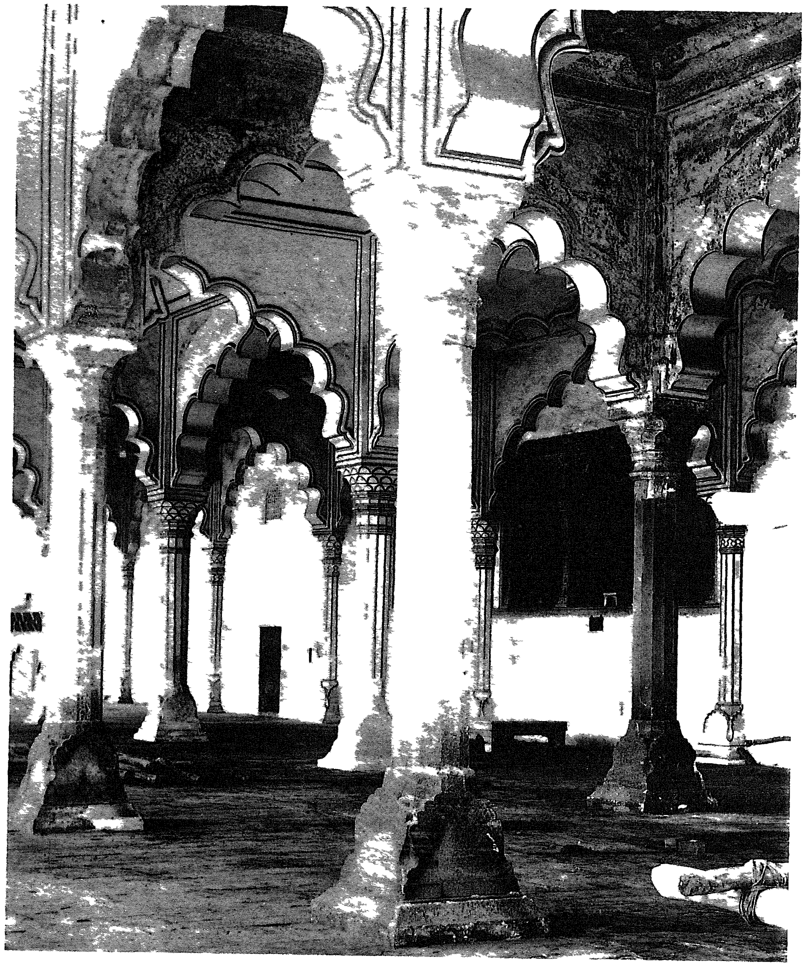


GAP IN NORTH WALL OF QUADRANGLE.

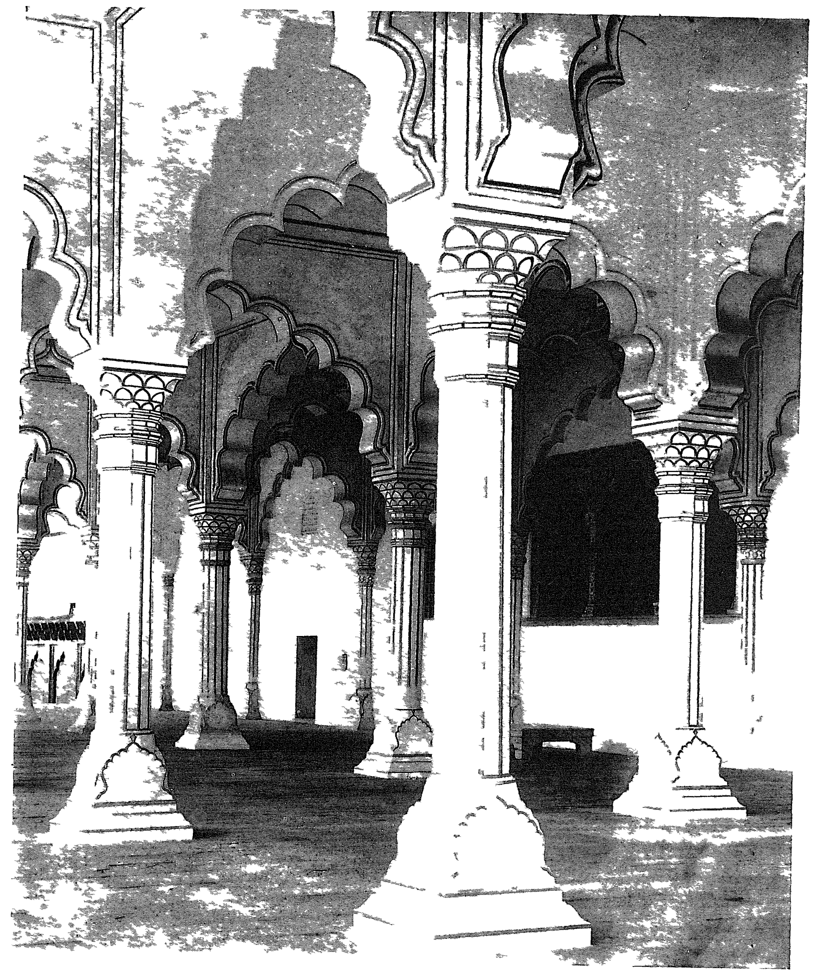
(*a*) BEFORE RESTORATION.

(*b*) AFTER RESTORATION.

THE DIWAN-I-ĀMM AGRA FORT



(*a*) THE INTERIOR BEFORE REPAIR.



(*b*) THE SAME AFTER REPAIR

A matter of minor importance in the Fort has been the repair of the gates of Ghaznī—more commonly called the Somnāth gates. The story of these gates is almost too well known to be repeated. They were brought from the tomb of Mahmūd of Ghaznī by the British in 1842, and it was popularly believed that they were the famous gates of the Somnāth temple, which that monarch had carried off from India more than eight hundred years before. As a fact, the story had no foundation whatever; but official authority was given to it by the historic proclamation of Lord Ellenborough, and ever since then the gates have been invested in the eyes of the public with a wholly fictitious interest. No doubt the old tradition will still cling to them for some time to come—such traditions, indeed, die hard, especially in guide-books—but the following notice which has now been posted up regarding their origin and history will at any rate assist in dispelling the mistake.

"These gates which were brought from Ghaznī in Afghānistān by the British in 1842 are stated to have been taken from the tomb of the famous Mahmūd Yamīnu-d-Daulah of Ghaznī (999—1030 Hijrī). At the time of their removal it was erroneously supposed that they had been carried off by that monarch from the Hindu temple at Somnāth, and a proclamation was issued by the then Governor-General, Lord Ellenborough, that they were to be restored with all due ceremony to their original home. They were accordingly conveyed in Lord Ellenborough's train from Fīrozpūr to Agra, but the intention of restoring them to Somnāth being abandoned they proceeded no further on the way to their proclaimed destination.

"The tradition, based on no historical authority, that these gates were of sandal wood and were brought from Somnāth[1] is completely disproved by the fact that the wood of which they are constructed is the local deodar of Ghaznī, that the style of their decoration bears no resemblance to Hindu work, and that an Arabic inscription in Kūfic character relating to the family of Sabuk-Tigīn is carved upon them."

The doors are divided by upright styles or pilasters, ending at the top in shapes like elongated Saracenic capitals. Between the styles are star-shaped panels elaborately and beautifully carved. The doors extend up to about two-thirds of the height of the whole framework, and over them comes a tympanum covered with a pattern formed of hexagons. Around the upper half of the framework there is a wide architrave adorned with a row of octagons of deodar pine, like the rest. Many of the panels are missing, and the spaces have now been filled with plain pieces of stained wood. As an experiment one panel was carved in imitation of one of the old ones, but it was decided not to continue the carving upon the rest.

Sikandarah.

The history of Sikandarah has been much the same as that of the Tāj so far as repairs are concerned; the mausoleum was renovated in the beginning of the nineteenth century, but nothing was done until comparatively recent years to save any of the subsidiary buildings except the south gateway. Of the other gateways, that on

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[1] The present ruined temple at Somnāth was built by Kumārapāla in A D 1169, and was the second reconstruction of the building since it was destroyed by Mahmūd. No evidence, therefore, regarding these gates can be adduced from the size of its portal See *Prog Report of Arch Survey. Western India*, 1898-9, p. 8. [Ed.]

the north side of the grounds has been conserved as a ruin, which is too far gone for repair; the one on the west has been thoroughly restored, and we are now at work on the last of the group, the east gateway—unless, that is to say, it is decided at some future date to restore the tops of the broken minarets on the south gateway.

The previous number of this Annual describes the beginning of the work on the east gate. The parts first taken up were the outer or east face, and so much of the north and south wings as stands outside the garden wall. The rest of the north and south faces has now been restored, and the platform on which the gateway stands has

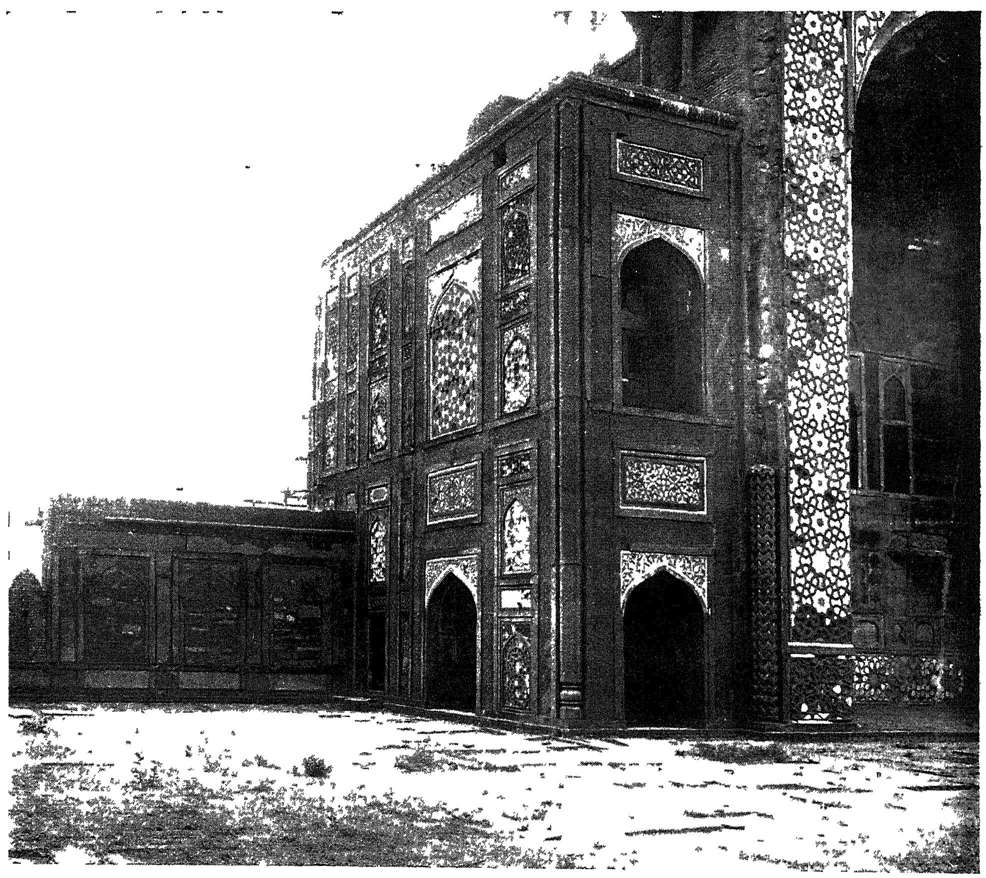


Fig. 1.

been repaved. The work was chiefly concerned with replacing pieces of marble inlay, and restoring panels of red sand-stone. In many cases the corrosion of iron dowels had been a fruitful source of mischief, as it is in so many old buildings in India. Two long and narrow panels, which have been restored at the top of the north and south façades, respectively, deserve to be noticed. They derive particular interest from the fact that they have an elaborately carved instead of the usual flat surface for the background of the white marble designs In other respects the decoration of the gateway is of the kind commonly found on buildings of Akbar or Jahāngīr. None of the wall surface is left bare; the inter-spaces between the panels are carved with

delicate geometrical figures in low relief, and, in the panels themselves, vases, peacocks, flowers and elephants are represented.

There is little doubt that this gate, as well as the other three gates and the mausoleum itself as we see it to-day, is the work of Jahāngīr and not of Akbar as stated by Fergusson,[1] and repeated by other writers on the subject. The evidence, however, on this point is not absolutely explicit, and it deserves therefore to be stated, especially as the true assignment of these buildings to one monarch or the other is a matter of some importance to the history of Mughal architecture. Fergusson does not, unfortunately, tell us upon what evidence he bases his assertion that Akbar commenced to build his own tomb. He may have been influenced by the account of the traveller Hawkins who left Agra in A.D 1611, and who remarks that "It hath beene this foureteene years a building."[2] As Akbar died in A.D. 1605 this would carry the commencement of the building back to eight years before his death. But against this the following points should be weighed :—

1. An inscription in Tughrā character on the south front of the south gateway written by 'Abdu-l-Ḥaqq in A.H. 1021 (A.D. 1612) states that the mausoleum and the south gate were *finished* by Jahāngīr in A.H. 1021, after seven years. It should be remarked that the word for *finished* does not necessarily imply that it was commenced by some other person. The expression *sūrat-i-itmām tamām yāft* may equally well mean that it was begun and finished by Jahāngīr. At all events, as Jahāngīr succeeded to the throne in A.D. 1605, the inference to be drawn from this inscription is that the building was commenced in the year of Akbar's death.

2. Jahāngīr himself states in the Tuzuk[3] that he visited the works in Rajab A.H. 1017 (August A.D. 1608), and that the work had then continued "for three or four years." This clearly implies that it was commenced about A.D. 1605.

3. The "memoirs of the Emperor Jahāngueir"[4] translated from a Persian manuscript, mention that Jahāngīr allotted a sum of money for the erection of the mausoleum, and, later on, that "the buildings which I (Jahāngīr) had long since ordered had now been completed," in the fourteenth year of his reign. The inscription has already told us that the mausoleum and south gate were finished in 1612, the seventh year of Jahāngīr's reign. The remaining three gateways and the causeways would naturally take some time to build, so that this evidence does not contradict our argument.

4. There is the significant fact that neither Jahāngīr in his memoirs, nor the inscriptions on the south gateway make any mention of Akbar having commenced the work. This is the more remarkable because Jahāngīr was not in the habit of letting slip any opportunity of singing his father's praises.

The evidence of Muḥammad Sāliḥ,[5] an historian of Shāh Jahān's reign, does not help us much one way or the other. He tells us that it was settled that Akbar should be buried at Sikandarah, for which reason the place was called "the land of Paradise" (Bahishtābād) and that a pleasant garden was laid out there and a lofty building erected by order of Jahāngīr. But in the same breath he adds that the garden and

[1] Fergusson, *History of Indian and Eastern Architecture*, 584.
[2] *The Hawkins Voyages*, edited by C. R. Markham, C.B., F.R.S. London, 1878, p. 442.
[3] *Tuzuk-i-Jahāngīrī*, (Allygurh, 1864), p. 72.
[4] "*Memoirs of the Emperor Jahāngueir*," translated by Major David Price. Calcutta, 1904, p. 135.
[5] '*Amal-i-Sāliḥ* manuscript in the Public Library at Lahore.

building were finished in *twenty years*. How are we to reconcile this *twenty years* with the "memoirs of the Emperor Jahāngueir" cited above? On the other hand, how can the statement that a pleasant garden was laid out and a lofty building erected by order of Jahāngīr be reconciled with the theory of Fergusson? It must be mentioned that the "memoirs of the Emperor Jahāngueir" contain some very inaccurate statements, as, for instance, the following:—"Above the tomb is erected a pavilion of *seven storeys*, gradually lessening to the top, and the *seventh terminating in a dome or cupola*, which, together with the other buildings connected with it in every part of the enclosure is *all of polished marble throughout......*" Clearly we should be rash in attaching much importance to a manuscript which draws so largely on the imagination. But our faith in the inscription on the south gateway, and in Jahāngīr's account in the Tuzuk remains unshaken.

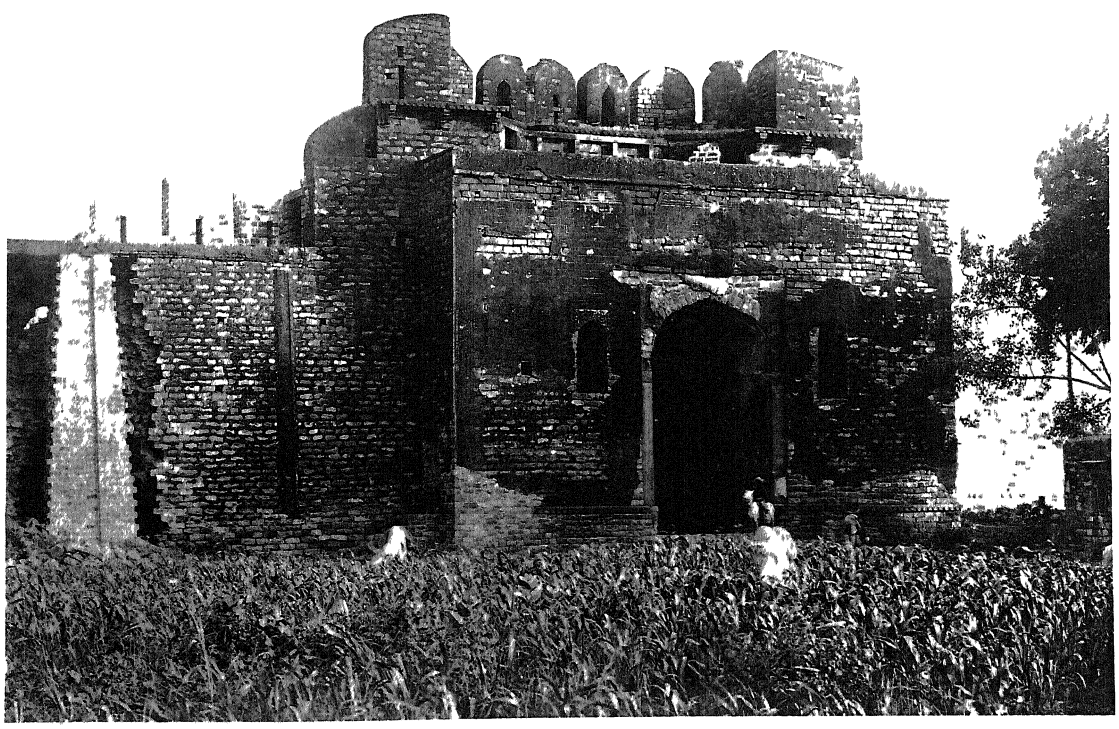
There is one other point in connection with the passage in the Tuzuk which deserves notice as another interpretation might be admissible. The passage runs as follows:—"On Sunday, the 17th Rajab A.H. 1017 (August A.D. 1608), I started on foot with the intention of visiting the enlightened mausoleum of his departed Majesty (Akbar) .... I saw the building over the enlightened grave. It did not appear to me to be the kind my heart desired, because it was intended that the travellers of the globe should not be able to point out the like of it in the inhabited world. As in the course of the work on this building the ill-starred Khusrau rebelled, out of necessity I started for Lahore. The masons had made it one-storeyed after their own manner. At last some alterations were suggested. Notwithstanding that the whole amount had been spent, and the work continued for three or four years, I ordered that the masons in consultation with skilled advisers should *once more knock down some parts as had been decided*. By degrees a lofty building was made, a garden laid out in extreme neatness around the building of the enlightened mausoleum, and the gate constructed extremely high and exalted with white marble minarets ....."

It is just conceivable from this account that Akbar had started a building which Jahāngīr did not approve of, and which the latter remodelled. That Akbar had a garden at Sikandarah we know from the introduction to the Tuzuk-i-Jahāngīrī; but it is at any rate safe to say that the exterior of the buildings, if not their plan and foundations, is the work of Jahāngīr.

Fatḥpūr Sīkrī.

The present condition of the buildings of Akbar at Fathpūr Sīkrī compares favourably with that of any remains of the Mughal period. There are, it is true, a few remarkable buildings in the *bāzār* to the south-west of the Dargāh of Salīm Chishtī which are standing in need of repairs. But little remains to be done to the main group which visitors generally see. Of course some structural repairs become necessary from time to time, as recently at Bīrbal's house, where the foundations showed signs of giving way. The walls of this house are built up from the solid rock, and the pavement round the building is carried on stone beams and piers. The dark vaults formed by the latter used to be a favourite resort of all manner of wild beasts until they were screened off by wire netting. Some years ago the roof of the vaults was strengthened by intermediate arches, but in 1901 it became evident that





(*a*) THE AGRA GATE
(*b*) THE GWALIĀR GATE.

further protective measures were needed, and some extra supporting walls and arches have accordingly been added. All of this work is below the ground, and the appearance of the building has not been in any way altered.

The most recent change which the visitor is likely to notice is the removal of the cumbersome rubble piers from the colonnade of the King's stables, which had been built to hold up the failing roof. The *chajjas*, or projecting dripstones above the arcade, have also been restored in places where they sagged very badly or were broken away.

There is no other new work to notice in the palaces, unless we mention some small repairs to the pavements in the Khāss Maḥall and the palace of Jōdh Bāī. But now that the scheme of conservation is fairly complete so far as the palaces are concerned, attention has been concentrated upon the city walls. Great and thorough though Akbar was in most of his undertakings, in the building of the walls at Fatḥpūr Sīkrī he came near to anticipating the methods of the modern speculative builder. Their deplorable condition must strike everyone who sees them. After all, they are less than half as old as our Norman walls in England. But where the Normans used mortar, the builders of these walls used mud and rubble stone, with a capping of concrete on the top to prevent the first downpour from washing it all away. No wonder then that half of the walls have already disappeared, and that the rest can hardly be kept standing. The cost of extensive restorations would be quite prohibitive, but a great deal has now been done towards retarding decay by building up a short length of the fallen facing at each reveal in the manner shown in Pl. VI, Fig. (*b*). This forms a sort of buttress, supports the overhanging concrete, and carries off the rain water from the top of the wall, which would otherwise penetrate into the rubble hearting and bring about its ruin.

Near the gateways the walls have been differently treated. The gateways themselves have been repaired and short lengths of the wall have been restored on either side of them. At the Agra gate, in particular, about two hundred lineal yards on the north side, and three hundred on the south, have been completely restored. The reasons for this were two-fold; in the first place it seemed desirable to preserve one good specimen of the wall, and secondly the Agra gate is a conspicuous feature in the landscape, and is the one through which the main road from Agra passes.

Delhi.

Upon entering the Punjab we pass into a district which is a veritable museum of architectural relics If at Delhi the buildings of any one monarch stand out from the rest, they are those of Shāh Jahān. Just as Akbar made Fatḥpūr Sīkrī all his own, so did Shāh Jahān make the Fort at Delhi. But the buildings in Shāh Jahānābād met with very severe treatment after the mutiny, and the remains that have come down to us are only a fragment and suggestion of what was once there. Although a few of the ancient buildings are still used by the Military, most of them have now been given up, including the important group which goes to make up the Ḥayāt Bakhsh garden. The connection of this group was entirely destroyed when the garden was converted into a barrack-yard. The garden in question occupies a square, about 200 yards in length and width, immediately on the north of the group of

historical buildings still extant in the Fort. It contains two exquisite marble pavilions, Bhādon on the south, and Sāwan on the north,[1] and its central feature is a large tank with the Zafar Mahall in the middle. On the east or river side are two buildings, the Shāh Burj and the Hīrā Mahall, while on the west all traces of the Mahtāb Bāgh[2] have long since been entirely swept away, and hideous barracks erected in its stead.

The whole of the Hayāt Bakhsh garden is covered with accumulated earth and *débris*, but some trial digging revealed that the old water-courses and the central tank still exist about three feet below the surface. In the course of the next year or two these will be excavated Meanwhile a beginning has been made upon the buildings remaining above ground, all of which were in more or less serious need of repair A full account of the garden will be deferred until its restoration has approached completion, but we must mention here the interesting discovery of two marble tanks. One of the tanks was found in the floor of the pavilion on the south side of the Shāh Burj, and the other beneath the floor of Sāwan (Plate VII). Both of these tanks have inlaid bottoms, but the former is a comparatively shallow basin, while the latter is rectangular, about four feet deep, with rows of candle-niches along the sides.

Besides the Ḥayāt Bakhsh garden there are only two other monuments in the Fort which call for notice, the Motī Masjid and the elephant statues at the Delhi gate. While in the Ḥayāt Bakhsh garden we had to dig and to discover, in the Motī Masjid only a few finishing touches were required. Some inlay has been restored in the spaces marked out for worshippers on the floor, and in the border of the tank in the centre of the court. In the prayer chamber, two panels of white marble, bearing a reticulated design carved in relief, have been placed in the gaping openings in the north wall. The building is now all but perfect. It does not bear comparison with the Motī Masjids of Agra and Lahore, but that could hardly be expected since this Masjid was built in the days of Aurangzeb, when the decline of Mughal architecture had already set in, and the value of plain surfaces and the sparing use of ornament was no longer appreciated.

As regards the elephants outside the Delhi gate a full account of their history and their restoration will appear in a subsequent Report. At this juncture it is sufficient to state that the foundations of their original pedestals have been unearthed, the pedestals themselves rebuilt, and careful models made of the elephants and their riders, to assist the workmen in reconstructing them.

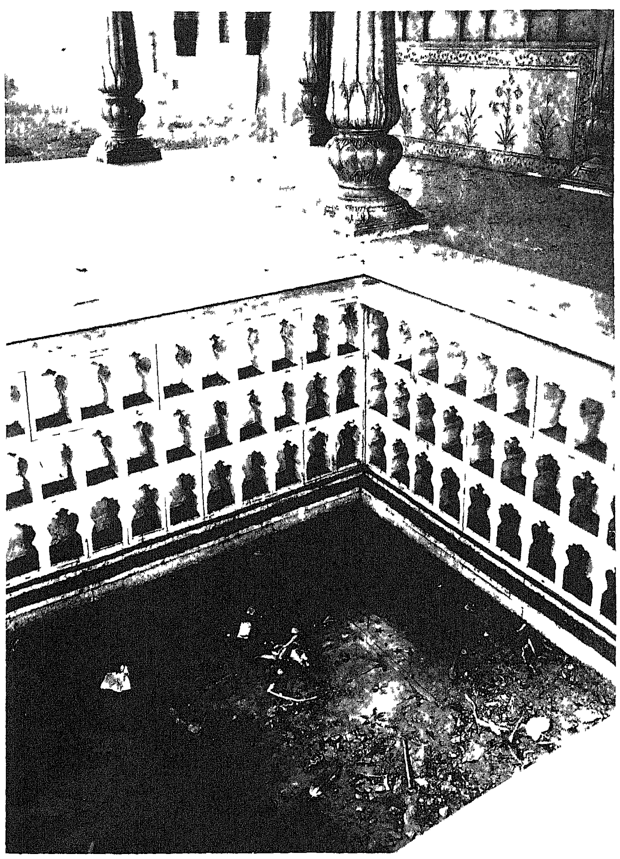
Leaving the Fort we pass on to several monuments of an earlier date, and as we do so, we realise the striking difference between the dazzling white marble of Shāh Jahān and the quiet coloured sand-stones, which his predecessors generally used This is a change which is not merely skin-deep. Each material calls for special treatment, and becomes an important factor in the evolution of a fresh style. Thus the typical buildings of Shāh Jahān sought to attract attention by the beauty of their marble, and in

[1] Fanshawe (*Delhi Past & Present*, map, p 23) calls the pavilion on the *north* Bhādon, and that on the *south* Sāwan. Sayyid Ahmad however is probably correct in styling the *northern* pavilion *Sāwan* and the *southern* one *Bhādon*. The latter nomenclature has been adopted in the text, but the mistake was not discovered in time to alter the title of Plate VII which has been entitled *Sāwan building*: *Delhi Fort*.

[2] Literally 'Moonshine garden'



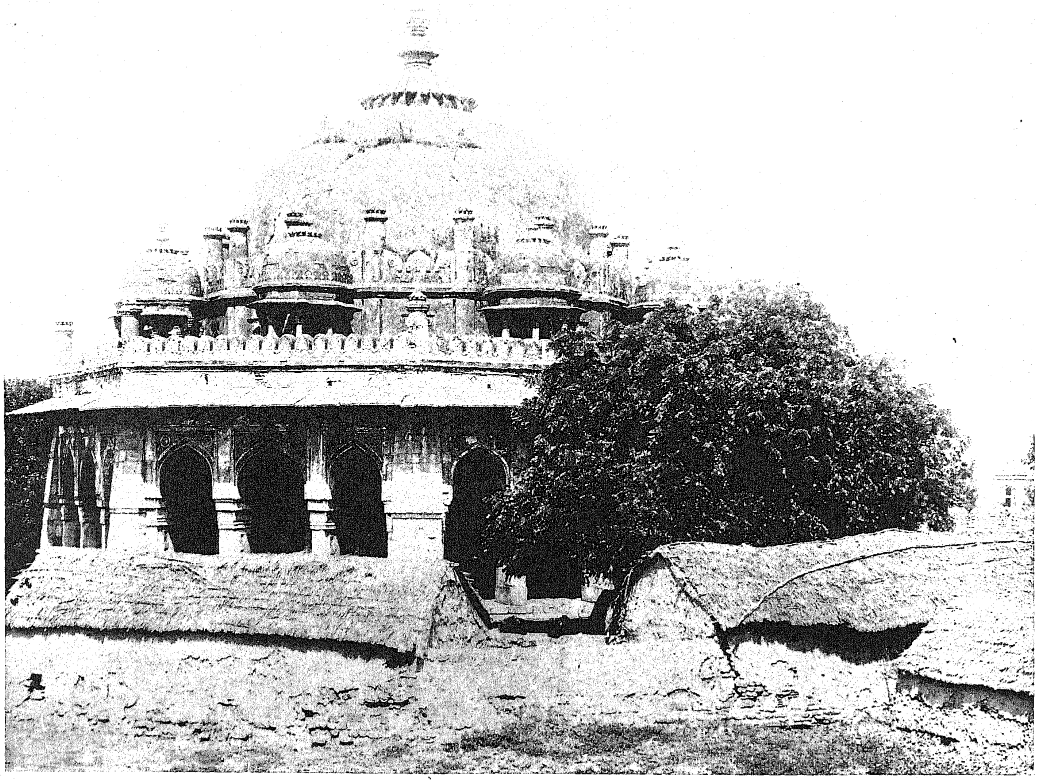
b



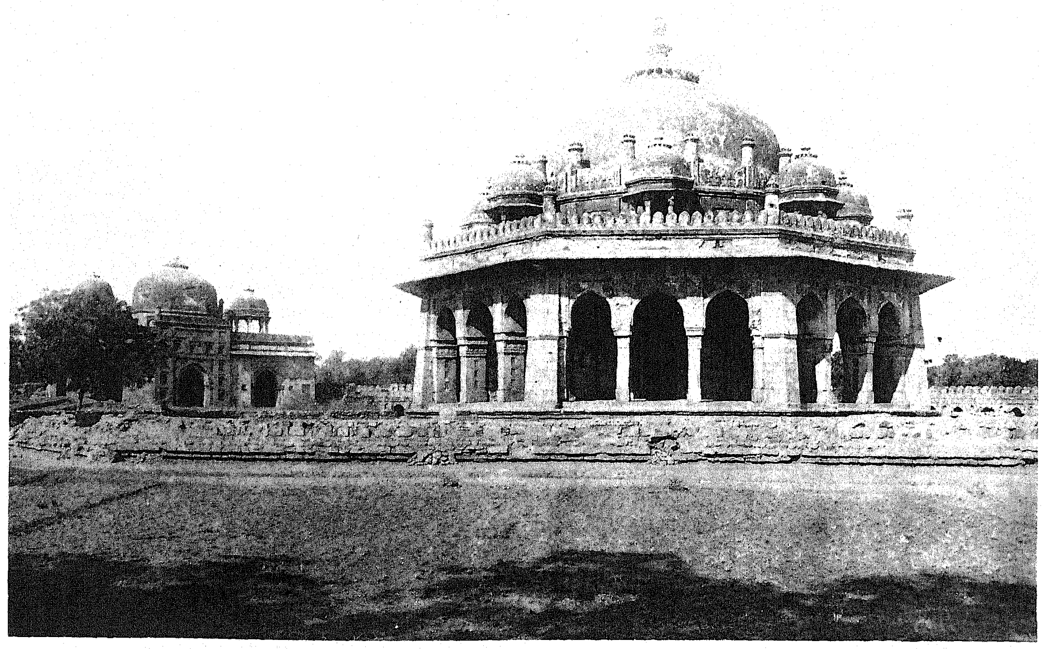
(a) GENERAL VIEW.

(b) THE TANK AFTER EXCAVATION.

a



b



(a) SHOWING THE SURROUNDING HUTS.
(b) AFTER THE REMOVAL OF THE HUTS.

this they were bound to succeed so long as they restrained their ornament, and grew in simple, graceful lines. The Paṭhān buildings on the contrary had no marble to display, and so they strove to impress by their muscular strength and stolid dignity.

The tomb of 'Īsā Khān is a happy example of the latter class. It is a building which has not hitherto received the recognition which it deserves, though it lies close to Niẓāmu-d-dīn and Humāyūn's tomb, two of the show places of Delhi. But its surroundings were all against it until this year. It is, indeed, difficult to imagine now its former state of dirt and untidiness, or to picture the crowd of huts which used to cluster round it, effectually preventing it from being seen to advantage from any point of view. The garden is now all but cleared; load upon load of accumulated soil has been carted away in order to expose the full height of the surrounding arcade of which about one-third was formerly buried; and, seen across the open space which will shortly be laid down in grass, the garden walls and mosque now form a background which adds immeasurably to the beauty of the tomb. The north gateway of the garden (fig. 2) has also required some attention. The outside is closed at the head

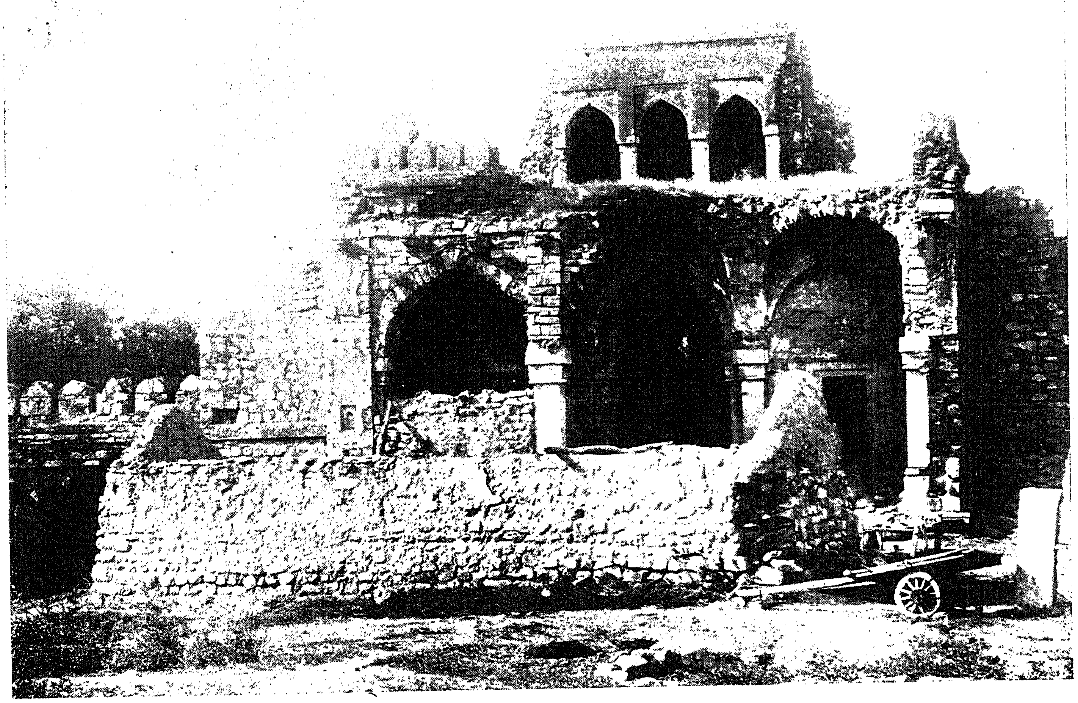


Fig. 2.

by bold corbel courses forming a false arch, and is well preserved; but the interior has had to be propped up to prevent some ominous cracks in the vaulting from spreading further. As for the tomb itself, it is in a good state of repair, and required little beyond cleaning.

Very different was the plight of the tomb of Tagah Khān (Plate IX) when it was taken in hand a year ago. This building stands just outside the east wall of the

Nizāmu-d-dīn enclosure, to which it seems to have been at one time connected through an existing archway.

It is described in the following terms by Sayyid Ahmad[1] —"This is the tomb of Shamsu-d-dīn Muhammad Khān of Ghaznī who was entitled Khān-i-A'zam. His wife Māham Angah, whom Akbar used to call Jī Jī Angah had nursed that Emperor, for which reason he was called Tagah In the reign of Akbar he held a very high position and was the Advocate General (*wakīl-i-mutlaq*) of the whole empire. Jealous of his high rank Adham Khān killed him on Monday, the 12th of the month of Ramadān A H. 969 (A D. 1561). In revenge the Emperor had Adham Khān killed by throwing him down twice from the top of the Fort, the figure one added to the numerical value of *do khūn shud* (two murders took place) expressed the date of this event His corpse was sent to Delhi and buried near the tomb of the Sultānu-l-mashāikh (Nizāmu-d-dīn). His son Kokaltāsh Khān built this stately building of red stone and white marble which has no rival Around the outside are inscribed verses of the Qurān. The foliage in relief is so well executed as to baffle description"

Some of the floral carvings are certainly remarkably good, and the proportions are on a par with the detail. It is indeed, a good illustration of the variety of feature

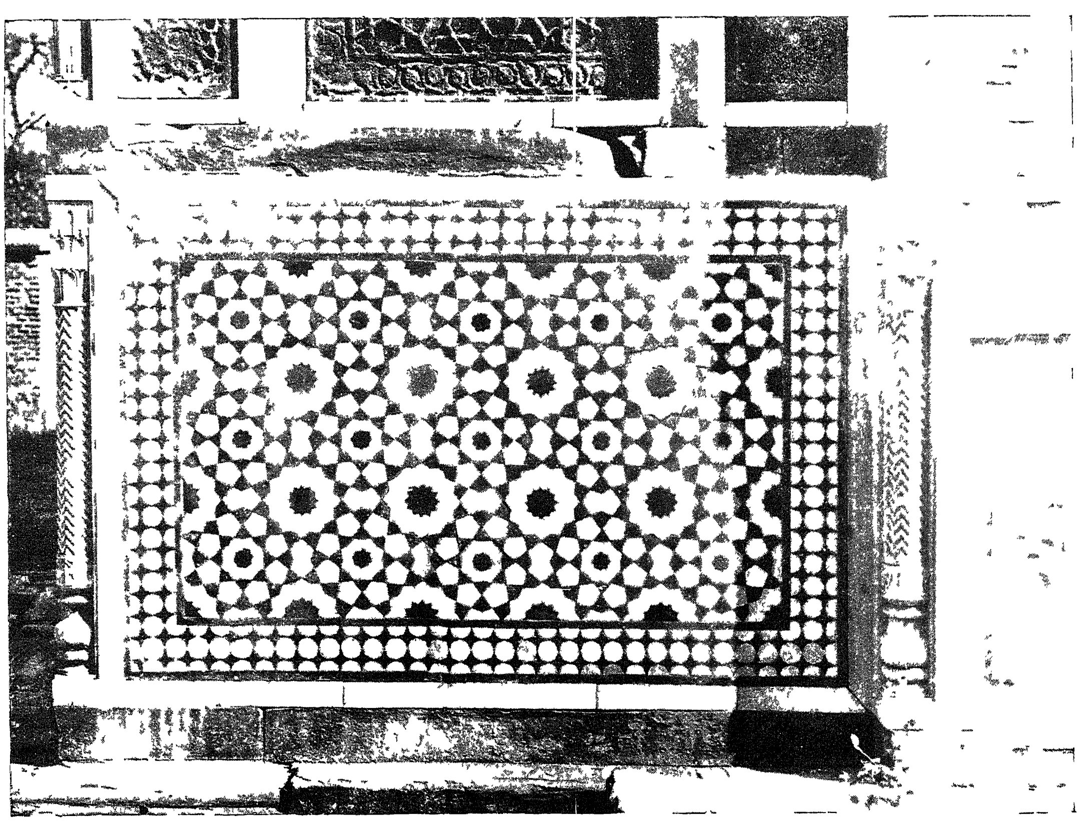
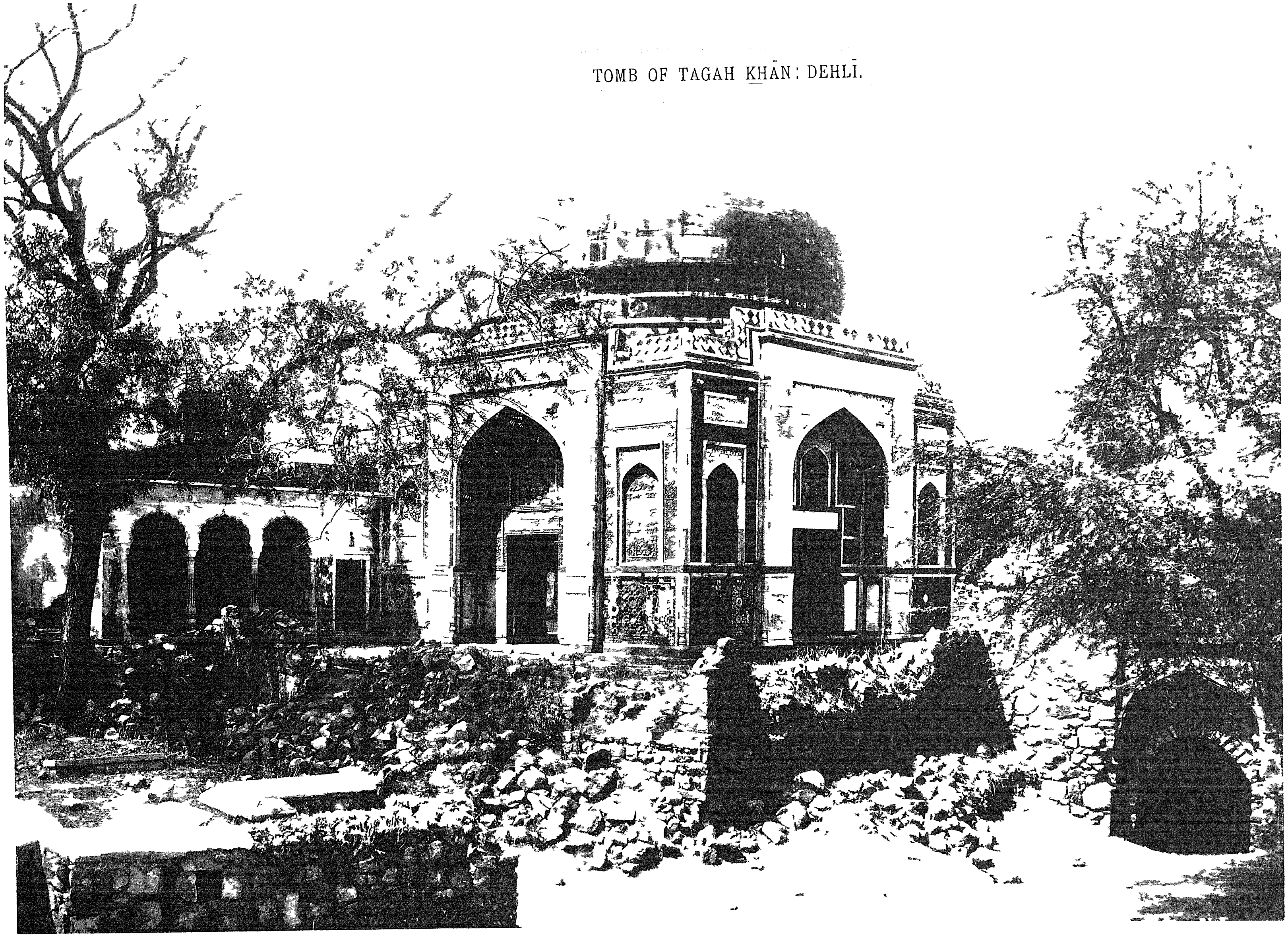


Fig. 3

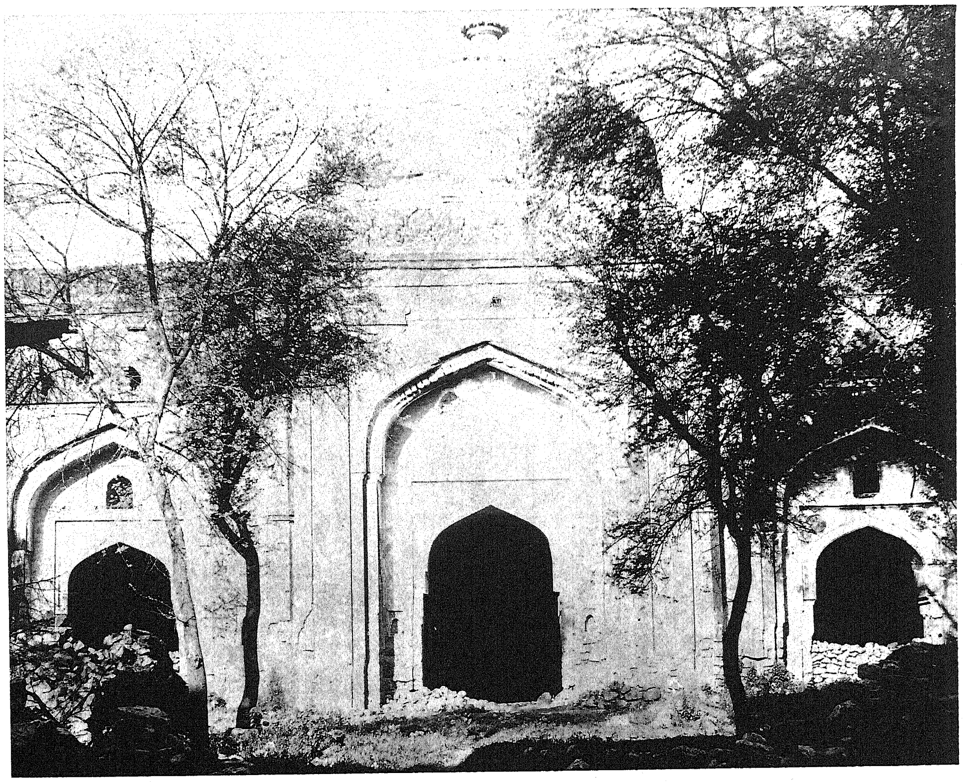
which the Mughal architect knew how to introduce into a practically plane façade by contrasting the colours of his materials, instead of having recourse to the contrast of

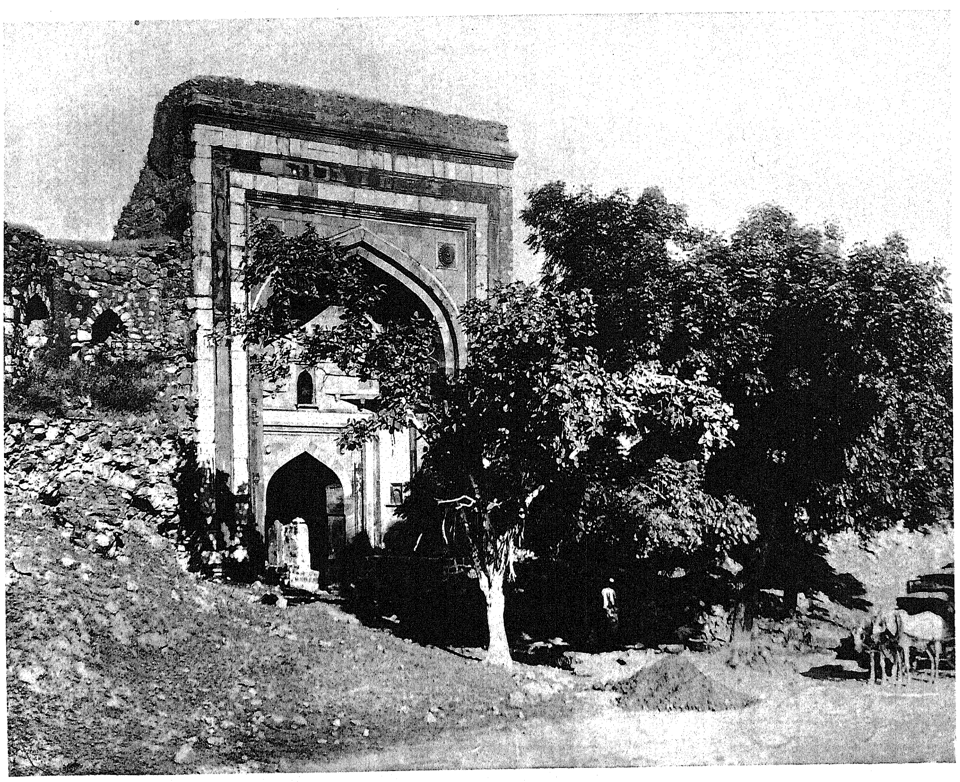
[1] *Āthāru-s-sanādīd,* Part 1, p. 100 *Cf* also Carr Stephen, *The Archæology and Monumental Remains of Delhi,* p 116.

TOMB OF TAGAH KHĀN: DEHLĪ.

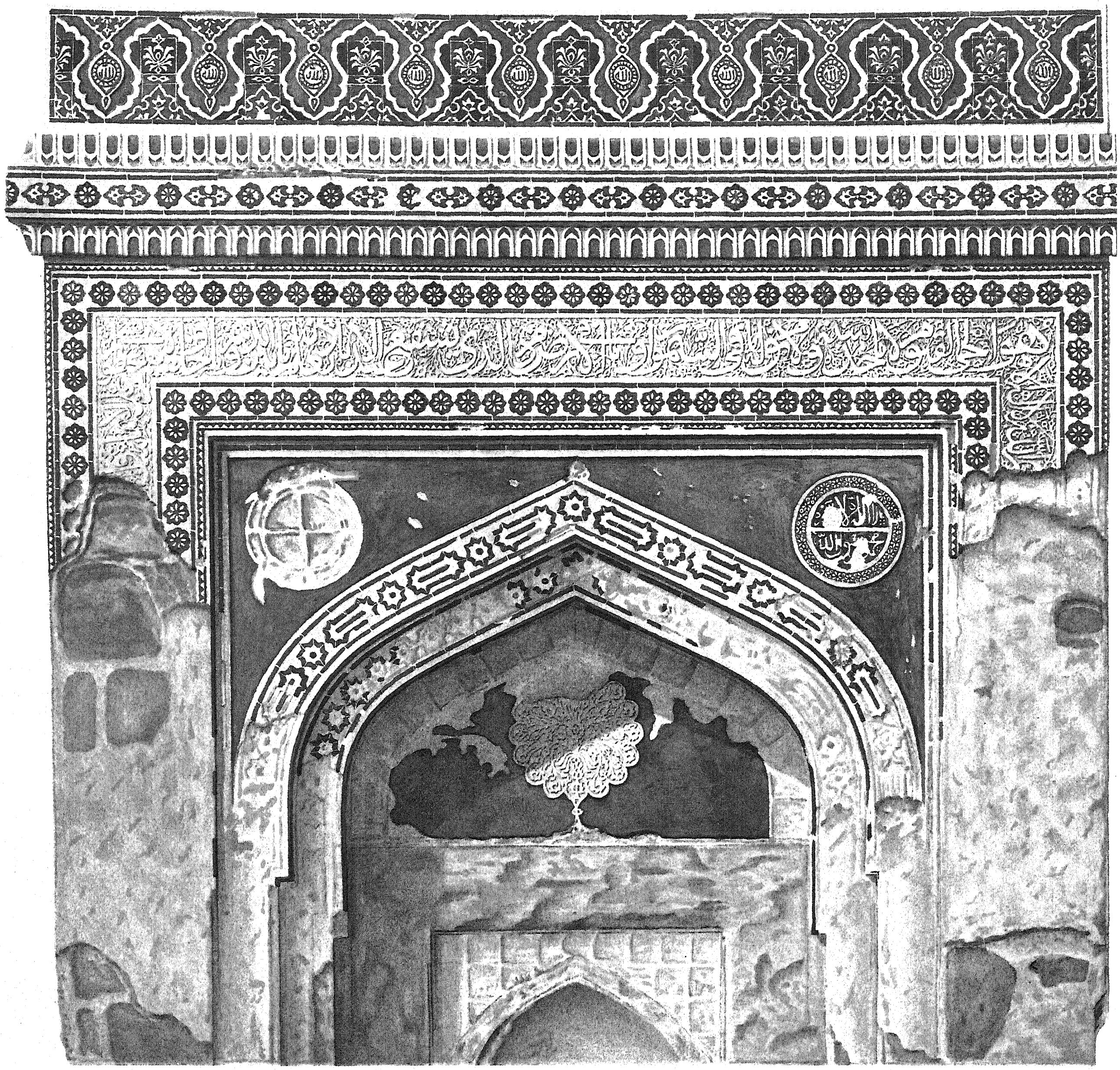


BEFORE REPAIR

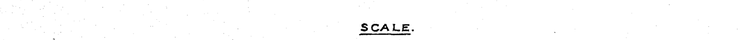




(*a*) THE MOSQUE. (*b*) THE GATEWAY.



CENTRAL MIHRĀB.



light and shade which a Gothic architect would have obtained by breaking up his surface with string courses and plinth mouldings.

The condition of the tomb before repairs may be gathered from Plate IX. The window openings above the doorways were blocked up with rubble stone, which has now been replaced by suitable *jālī* screens; several structural weaknesses required repair, and both the tomb and its courtyard were overgrown with vegetation. Fig. 3 shows one of the restored panels in the dado of red sand-stone inlaid with little octagons of white marble, which was copied from the fragments that remained of the original panel; it also shows, in the right hand portion, some of the original delicate chiselling and counter-sunk ornament in marble referred to by Sayyid Aḥmad.

Over the large archways on each of the four sides of the tomb some of the enamelled tile-work, as well as portions of the marble spandrels in which it was inlaid, had fallen away, and here fresh pieces have been inserted; a modern room, too, which had been built up to the south-west corner of the tomb has been partly demolished so as to leave the corner free.

The interior of the structure offers but little interest now, the original ornament upon the walls having been almost entirely lost, but a charming fragment of the painted stucco on the ceiling still survives, and has been carefully preserved.

At the tomb of Humāyūn repairs to the building itself have been limited to the renewal of several panels of the *jālī* balustrades in the alcoves and round the raised platform or ground storey, but extensive work has also been done in laying out the enclosure on its original lines. The whole of it has been excavated down to its old level, and sufficient traces of the channels, paths, and tanks were found to justify their complete restoration.

In passing the Khairu-l-manāzil between Humāyūn's tomb and Delhi, we may pause to notice the new doors, which have been fixed in the gateway. The gateway itself has been under-pinned and partially repaired; but the mosque, which stands on the west side of the quadrangle, is past saving. In order, however, to put on record some of its features before it eventually goes to ruin, careful drawings have been made of the interior decoration. The one[1] which is here published illustrates the upper part of the central *miḥrāb* — a very delicate piece of work executed in incised plaster, glazed tiles and distemper.

The incised plaster work commonly found in Mughal buildings in inscriptions and medallions, reminds one of the *sgraffito* work of Italy which is now being to some extent introduced into England. But the Mughals obtained the coloured ground of their *sgraffito* by painting in the colour after the surface of the plaster had been carved, while the Italian method consists in laying a distinct layer of coloured plaster on the wall, covering the coloured coat with a skimming coat, and then cutting and scraping away the skimming coat so as to show the colour underneath. Thus, while the Italian *sgraffito* lends itself to a broad treatment owing to the difficulty of laying the different colours of the colour coat in such a manner that the right colour will appear in exactly the right place when the skimming coat is scraped away, by the Mughal method patterns involving the most intricate arrangement of colours

[1] From a drawing by Ghulām Muhammad, Archæological Survey, Punjab and United Provinces.

can be worked. The advantages of the Italian method are two-fold, first because when once the *sgraffito* is executed it is much more lasting, and can be washed and cleaned; secondly because the restrictions on the design which the process entails are conducive to a broader and more harmonious effect, while the speckled appearance and glaring contrasts of colour which the Mughals sometimes produced—as, for instance, in the vestibule of Akbar's tomb at Sikandarah—are rendered impossible.

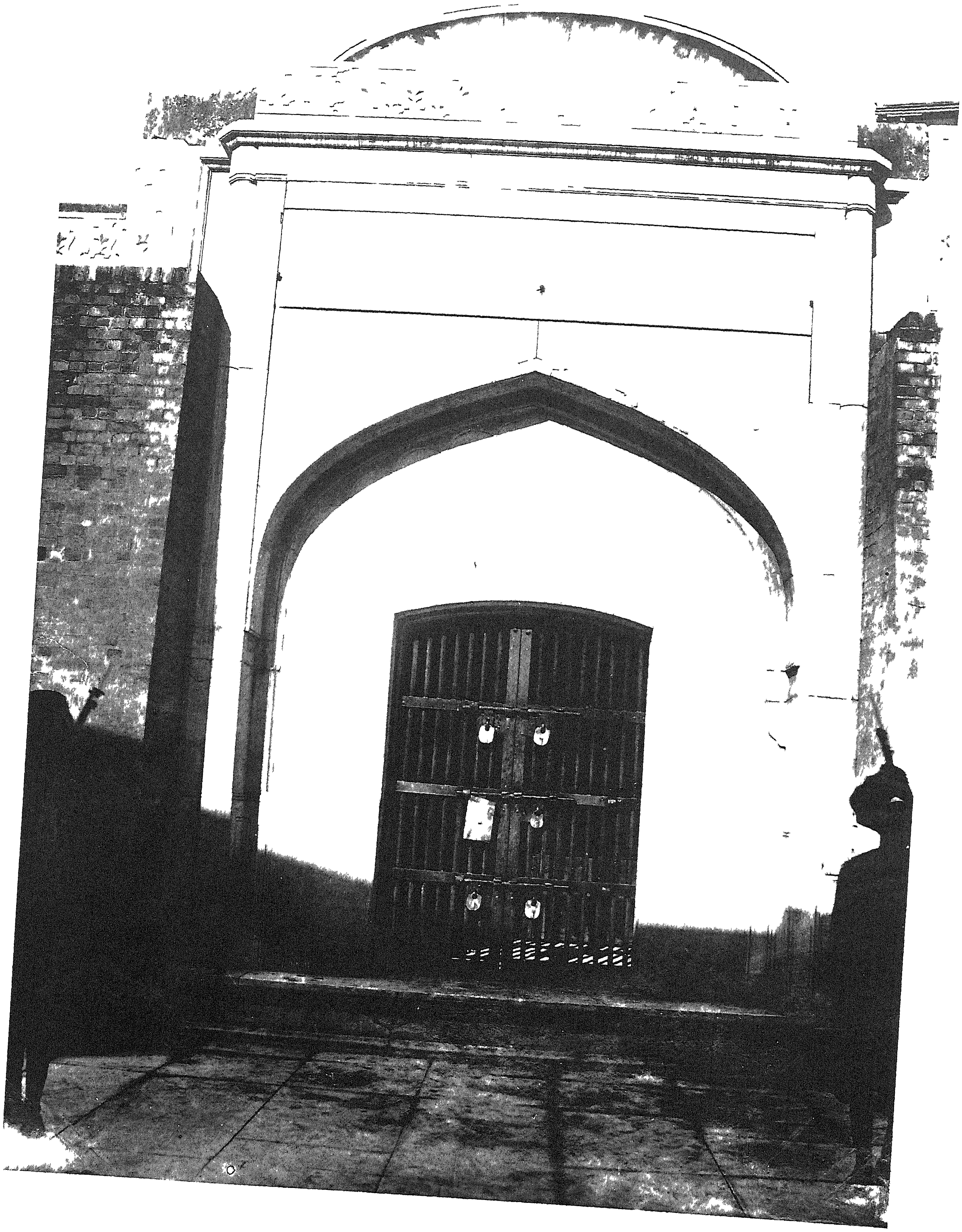
There is one other piece of work, at the Qutb, which should be mentioned before leaving Delhi. Some of the stone pillars in the Hindu colonnade of the great mosque have been dismantled and rebuilt in order to do away with the cumbersome buttresses which had been built up to support them. The three domes, too, which crown the central and end compartments of the colonnade, have been restored where portions of the corbelled rings had splintered and fallen away.

Lahore.

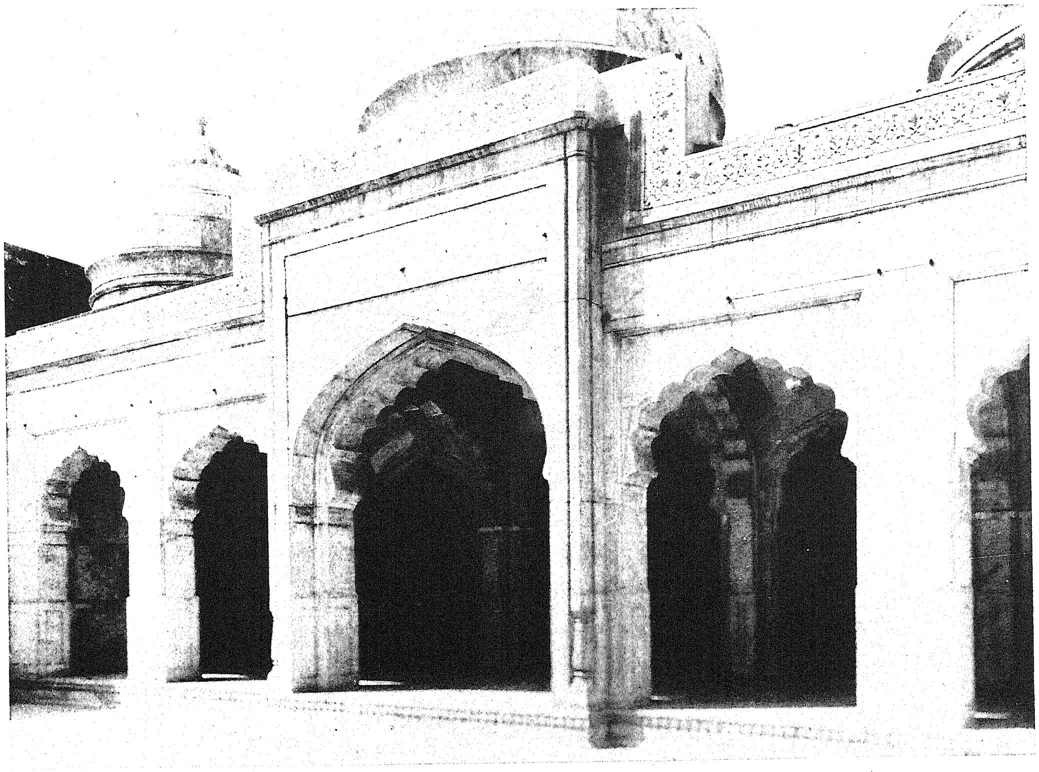
The Forts of Lahore and Delhi have passed through several parallel phases. In both cases the buildings of Shāh Jahān are more in evidence than those of any other monarch; both have suffered from the occupation of the British after the Mutiny, and in both it is only recently that anything has been done towards the up-keep of their historical buildings. At Lahore, indeed, conservation in the Fort may be said to have begun last year with the restoration of the Motī Masjid and the Chhotī Khwābgāh, of which the second will be described later on when the work is more advanced.

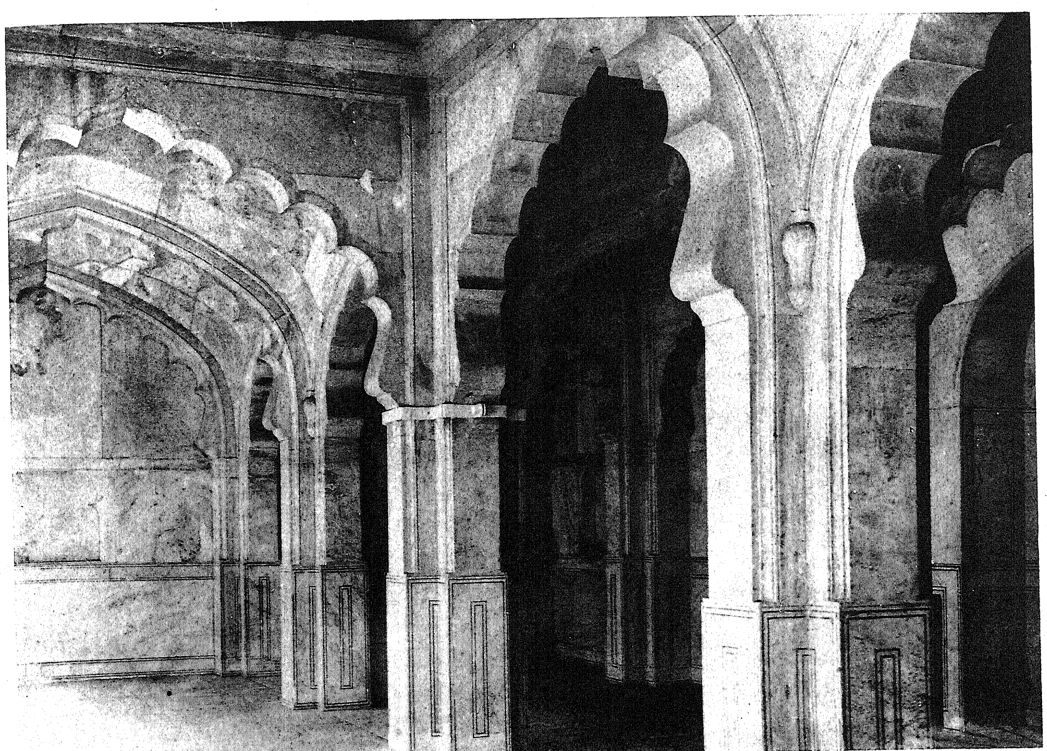
The condition of the Motī Masjid before it was taken in hand, may be gathered from the following extract from a speech delivered by Lord Curzon before the Royal Asiatic Society of Bengal in February 1900:—"When I was in Lahore in April last, I found the exquisite little Motī Masjid, or pearl mosque, in the Fort, which was erected by Jahāngīr exactly three hundred years ago, still used for the profane purpose to which it had been converted by Ranjit Singh, *viz.*, as a Government treasury. The arches were built up with brickwork, and, below, the marble floor had been excavated as a cellar for the reception of iron-bound chests of rupees. I pleaded for the restoration to its original state of this beautiful little building, which I suppose not one visitor in a hundred to Lahore has ever seen Ranjit Singh cared nothing for the taste or the trophies of his Muhammadan predecessors, and half a century of British occupation with its universal paint-pot, and the exigencies of the Public Works Engineer, has assisted the melancholy decline. Fortunately in recent years something has been done to recover the main buildings of the Mughal palace from these two insatiable enemies."

A comparison between Plate XII and Plate XIII will show the transformation which has now taken place—a work of rescue rather than restoration, since practically no rebuilding was involved. The mosque is in a sound condition, except that some of the piers, which sustain the arches of the prayer chamber, are cracked. Two of these were secured several years ago by means of iron collars, and a third is now standing in need of repair. The removal of the brickwork, which formed the treasury walls,



CENTRAL ENTRANCE, BEFORE RESTORATION





(*a*) EXTERIOR OF PRAYER CHAMBER RESTORED.
(*b*) INTERIOR OF PRAYER CHAMBER RESTORED.

does not seem to have endangered the marble structure in any way, and it is now impossible to see where the brick walls stood except for some patches in the pavement of the courtyard, which denote the spots formerly occupied by piers.

From an artistic point of view this is quite the best of Jahāngīr's buildings with which we are acquainted. Shāh Jahān himself might well have been proud of it. Perhaps its most striking feature is the admirable way in which the design suits the material. What little ornament there is round the dado and beneath the parapet, is chaste and telling; and every stone in the building helps to express the half tones and deeper tints which white marble alone is capable of rendering.

Among other buildings at Lahore those at Shāhdara have come in for most attention, but a few words should be said regarding the marble pavilion in the Huzūrī Bāgh, which we pass on leaving the Fort. This *bāradarī* is the central feature of the garden which lies between the Bādshāhī Masjid and the walls of the Fort. It is a Sikh building, and, like others of that period, bears evidence of having been put together from stones torn from other buildings. Some repairs have been done to the ceiling which is covered with mirror work—not a pleasing kind of decoration, but typical of the time of Ranjit Singh.

Shāhdara lies on the further bank of the river Rāvī, about three miles distant from Lahore. The place is famous for its tombs and gardens, foremost among which is the mausoleum of Jahāngīr. Although this building was to a great extent spared from the vandalism which has left its mark upon the rest of the group, it has required extensive repairs on the west front and the roof. It is difficult to see merit in the general design. The building is, in fact, merely a vast square platform measuring about 200 feet on either side, with a minaret attached to each of the corners. But besides its historical associations, it has some qualities which warrant its being kept in thorough repair. The whole surface is decorated with inlay—the façades with white marble let into red sand-stone, and the flat roof with mosaic paving in geometrical patterns.

The tomb of Jahāngīr is the easternmost of the Shāhdara group. It stands in the centre of a large formal garden, which, on the west side, leads into the ruined Akbarī Sarāi.[1] West of the Sarāi again is the garden and tomb of Āsaf Khān. All of these buildings are symmetrically arranged, but the last of the group, the tomb of Nūr Jahān, stands away on the south-west, quite by itself. The ruined condition of the subsidiary buildings precludes anything more than conservation. All the marble that was worth stealing from them, was stripped off by the Sikhs, and it only remains for us to keep the rain from getting into the cores which they left exposed. The tomb of Nūr Jahān was overhauled a few years ago, and that of Āsaf Khān has now been treated in the same way. The latter still retains, in the arches on each of its eight sides, some of the original coloured tile-work; and the classic-moulded marble sarcophagus is still standing in the centre of the building, with its inlaid inscriptions practically intact.

It is, perhaps, not generally known that Āsaf Khān was a brother of the famous Nūr Jahān, and that he owed his position as Wazīr at the court of Jahāngīr to this relationship. Nūr Jahān was first married to a young noble, Shēr Afgan, but Jahāngīr contrived his death and made her his Queen. In this capacity she is said to have

[1] A courtyard with cloisters for the accommodation of pilgrims and visitors

gained great personal influence over the Emperor and control over affairs of State. After the death of Jahāngīr she lived in retirement upon a pension of two lakhs per annum, which Shāh Jahān allowed her.

The last building which we have to mention at Lahore is the mosque of Wazīr Khān in the city. The archæological value of this building consists chiefly in its tile decoration, though the too liberal use of yellow as a background in some of the floral patterns produces a rather insipid appearance. This must have been still more noticeable when it was in its prime, with all its painted imitation of brick-work and mortar joints. The tile-work is well preserved, but in certain places where it was loose or missing, the edges have been plastered round to prevent more from falling away. The minarets have also been thoroughly repaired, and *jālī* balustrades have been restored on the balconies of their upper floors. In the courtyard of the mosque several stone lintels have been renewed over the door-ways of the cloisters. The building is now almost in a perfect condition, except for the paintings on the walls of the prayer-chamber, which have been patched from time to time with plain white plaster. Upon one of these patches the painting was restored some time back as an experiment, but the rest have been left untouched owing to the difficulty of bringing the new work into harmony with the blackened and worn appearance of the old.

Lucknow.

None of the great builders of the Mughal period have left their mark upon Lucknow, and among the buildings erected by their successors, the kings of Oudh, there is a remarkable scarcity of architectural merit. The neglected appearance of the finest works of their predecessors, which must have confronted them wherever they went, no doubt had its effect upon the kings of Oudh, bringing it home to them that whatever they might build would perish with their bones, and it is not surprising therefore to find them using plaster instead of stone, and aiming at a temporary magnificence instead of building for eternity, as the Paṭhāns and Akbar had done before them. Narrow in their ideals, the kings of Oudh were unsuccessful in practice. A typical example of the style is the Jāmi 'Masjid at Lucknow, a building which has lately been repainted and repaired for utilitarian rather than archæological purposes.

Another group of buildings at Lucknow are those which derive their importance from the Mutiny events of 1857. One by one these are all being attended to, the last to claim attention being the Sikandar Bāgh—a garden, about 120 yards square, surrounded by a high wall, on the west side of which extensive repairs have been carried out.

Bahrāich.

Bahrāich is a small town in the Gonda district which derives its importance from the fact that it contains the tomb of Sayyid Sālār, a nephew of Maḥmūd of Ghaznī. At a very early age Sayyid Sālār led a Muhammadan crusade into Hindustān, and after a series of successes was eventually repulsed and killed, with most of his followers, on the spot which his grave now occupies. Ever since that event the place

[1] *Bādshāh Nāmah.* Bibl. Ind., Vol. II, 475-6.

has been held in great reverence by Muhammadans, and, at uncertain intervals, a group of buildings has grown up comprising the present Dargāh, which consists of two courtyards one inside the other. Probably the oldest of the buildings is the shrine of the saint, situated at the north end of the smaller courtyard. It is a plain small chamber roofed by a stunted dome built of rings of corbel courses. Except for some door-ways which have been pierced in the walls, it is probably now in very much the same condition as it was when Fīrōz Shāh Tughlaq visited it in A D. 1374. On the south side of the shrine, between it and the small courtyard, there was formerly a verandah with columns and brackets, and a panelled ceiling, all of wood. A few years ago this was found to be very rotten, and the Managing Committee of the Dargāh have since replaced it by a reproduction in white marble. Of course there is no true antiquarian interest attached to the modern reproduction; but it has this value, that it enables one to estimate roughly the character of the original design, much as a plaster cast, in lieu of anything better, may serve as a substitute for a silver coin.

The selection of marble for this work may have been partly due to the erroneous idea that in India wood cannot be made a lasting material; but it is principally due to the desire of the authorities to make their Dargāh as gorgeous as possible. The archæological value and traditions which are attached to ancient work, however plain, have not been fully appreciated at Bahrāich. The latest proposal is, in fact, to dismantle the actual shrine, and to replace it by a larger and more imposing structure bearing no resemblance to the original. Marble is out of place in a building of this kind, and the modern-looking black and white marble pavement, which was laid last year in the smaller courtyard, is an innovation that was not called for.

Still there are some interesting features left in the Dargāh. The old doors which led into the smaller courtyard bear exquisite carving—concealed by thick green paint, it is true, but this no doubt has tended to preserve them. Around the larger courtyard, too, there are some splendid wooden cloisters. Part of these has lately been replaced with red brick piers and arches for some inexplicable reason; but the rest is still in a fair state of preservation and such repairs as are necessary can easily be carried out without altering the character of the buildings.

W. H. Nicholls.

CONSERVATION OF ANCIENT BUILDINGS AT MĀṆḌŪ AND DHĀR.

MĀṆḌŪ or Māṇḍūgarh, known in Sanscrit copper plates of the Paramāra period as Maṇḍapa-durga, and to the Muhammadans of the 15th and 16th centuries as Shādiābād, was the capital of the Ghaurī and Khaljī dynasties which ruled in Mālava as independent sovereigns from A.D. 1405 to A.D. 1526. Prior to that time it formed one of the last strongholds of the Paramāra kings, as is evidenced from a recently discovered copper plate grant of Jayavarmadeva, dated from Māṇḍū A.D. 1261, *i.e.*, 26 years after the conquest of Ujjain by Altamsh. From 1526 to 1534, Māṇḍū was held by the kings of Gujarāt, and in the latter year was captured by Humāyūn.

Another brief dynasty followed the flight of Humāyūn, but the dignity of the place as the capital of a kingdom ended with Bāz Bahādur's surrender to Akbar, at Delhi, in A.D. 1570. From that time, except for a brief renewal of its prosperity in 1617, when Jahāngīr halted there six months, and caused some three lakhs of rupees to be expended on the repairs of buildings for himself and his court, decay was continuous; the climax being reached between 1840 and 1860, when, owing to wild animals, a visit to the ancient buildings of Māṇḍū was a dangerous affair.

The visit of Lord Northbrook, in 1875, caused some revival of interest in the site, and up to 1900 the Dhār Darbār, to whom Māṇḍū had fallen at the time of the Mahrāttā conquest of Mālava, spent some R30,000, in more or less spasmodic contests with the ever increasing devastations of nature. No systematic or continued effort, however, was possible until 1903, when, thanks to the interest taken in the place by His Excellency Lord Curzon, the Government of India made a grant-in-aid of R20,000, which again in March 1904 was supplemented by a further grant of R40,000.

The object of this note is to show what has been done, since March 1903, to carry out the object, for which these grants were made. The last chapter deals with similar works in Dhār itself, for which funds have been provided by the Dhār Darbār.

Few places can rival the natural beauty of the ancient fortress of Māṇḍū. The top of the hill, on which the city stood, is some 2,000 feet above the sea; and the circumference of the fortifications is not less than 25 miles. The whole hill juts out

from the main Vindhyan range, to which it is connected by a narrow neck of land only, and its sides slope precipitously to the plains of the Narmadā valley, the height of the southern scarp being some 1,200 feet above the ground level. Both the slopes and the top of the hill are, for the most part, covered with thick jungle, and at the present time the number of separate buildings still standing, to which attention might be devoted, is not far short of 40. Half of these may be set aside as unimportant, both architecturally and historically, but, even with what remains, the task of maintenance and repair is obviously a considerable matter, and, consequently, it was decided, in the first instance, to limit work on an extensive scale to those buildings, which are admittedly of first rate importance.

Fifteen buildings, in all, have come into the repairer's hands during the year, but out of this number there were only five to which it was possible to direct serious attention, and on these five, *viz.*, the Hindola Maḥall, the Tower of Victory, Hūs͟hang's Tomb, the Jāmi' Masjid and the Jahāz Maḥall, almost the whole of the Government of India's grants have been and are being spent. Considerable difficulty was experienced at first in starting work at all. Māṇḍū was still practically a deserted spot, and no skilled labour was obtainable in the neighbourhood. This difficulty was surmounted with the assistance of Mr. Stotherd, Superintending Engineer of Jaipūr, through whose instrumentality six fully qualified masons were imported, the number being afterwards gradually increased by local recruits, until at the present time nearly a hundred masons are employed, in addition to a large amount of unskilled labour. The work is actually managed by Mr. Bhim Sinh Rao, an Overseer in the employ of the Dhār State, acting under the immediate control of Mr. O'Gorman, C.E., who is in the joint employ of the States comprising the Bhopāwar Agency. With the exception of a small allowance granted to the Overseer, the cost of the establishment has been met by the Dhār Darbār, thus leaving the grant-in-aid wholly available for actual archæological work. At the beginning, with a view to ascertain the real cost of work of this kind, daily labour was employed under very careful supervision; and by this system rates have been calculated by which it has been found possible to give the work out to contractors on satisfactory terms. In this way it is calculated, from a comparison of the cost of the work done with the cost of the same at ordinary rates, that some R7,000 have actually been saved.

The Hindola Maḥall.

The date of construction of the Hindola Mahall cannot be fixed with exactitude, as unfortunately, in spite of extensive excavations, no inscription has been discovered, nor is the building specifically mentioned in any history to which I have had access. There can, however, be little doubt that it is one of the earliest of the Muhammadan buildings in Māṇḍū. From its outward appearance there is no sign of Hindu workmanship, but the repairs, that have been going on during the past year, have brought to light a very large number of stones used in the structure, which appear to have been taken from some pre-existing Hindu temple. The facing stones, which have been most accurately and smoothly cut on their outer surfaces, bear in very many cases on their inner sides the undefaced images of Hindu gods, or patterns of purely

Hindu design'; while pieces of Hindu carving and broken parts of images are found indiscriminately mixed with the rubble, of which the core of the walls is made.

As will be seen from the annexed plan (Fig. 1) the building is T-shaped. A great Darbār Hall, $88\frac{1}{3}'$ long by $24\frac{1}{4}'$ broad and $38\frac{1}{4}'$ high, occupies the whole of the stem of the T, while the ground floor of the cross piece is taken up by passages, store rooms, a stairway, and a broad ramp leading up to the upper floor, where there is another fine apartment, evidently intended for the Zanana. The stairways at the north and south of the building lead further on to the roof, which was flat, but which, owing to the great space between the supporting arches, has now entirely fallen in.[1]

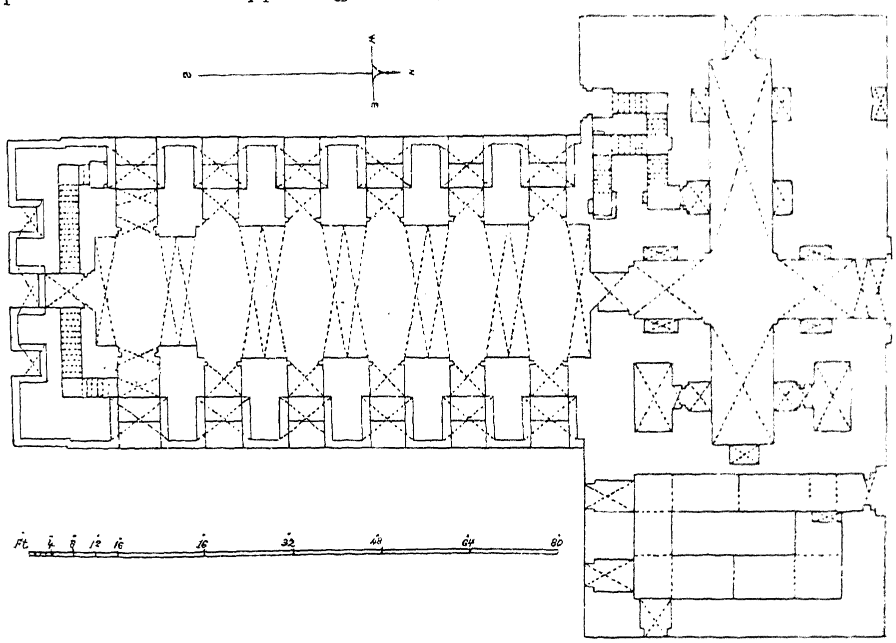
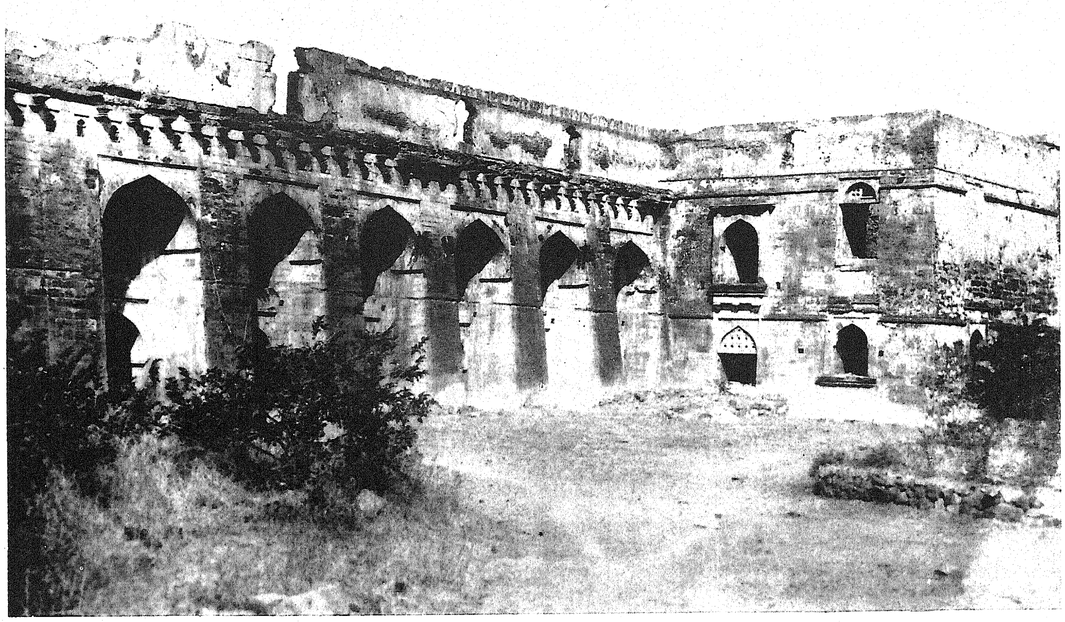


Fig 1.

Plate XIV gives a general view of the building from the south-east, as it was before the present work was undertaken, and as it is now. The feature, which at once strikes the eye, is the massive buttresses supporting the walls of the Darbār Hall on three sides. These do not appear at the northern end of the building, the walls of which, however, are not perpendicular but slope inwards as they rise. For purposes of comparison with this style of architecture the tomb of G͟hiyāt͟hu-d-dīn Tug͟hlaq (A.D. 1320-25) at Tug͟hlaqābād near Delhi may be mentioned, but the Hindola Maḥall is in every way a finer building and may probably be regarded as the best of its kind in India. Plate XVII (*a*) shows the interior of the Darbār Hall, with its fine cross arches, six in number, which formerly supported the roof. These have now been rebuilt up to the roof level and rendered water-tight. As regards the general description of the building, there only remains to add that the exterior is faced with large blocks of pinkish red sand-stone, most excellently cut and fixed, while the whole of the interior is of greenish grey laterite.

When work commenced in March 1903, the floor was on an average about 4′ below the outside ground level. Stone steps led down to it, from a door at the south-

[1] Mr. Cousens is of opinion that the roof was supported on wooden beams, which have been carried off, as has happened in so many buildings at Bījāpūr and other places. [Ed.]





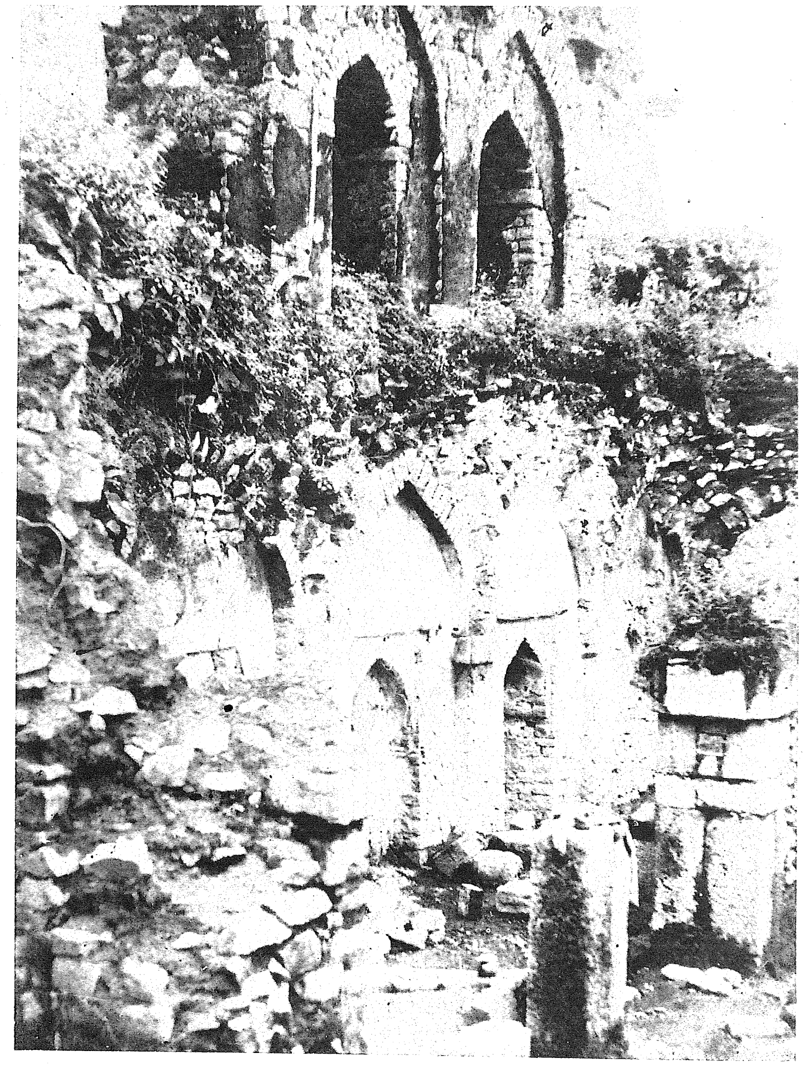
(*a*) VIEW FROM THE S.E.

(*b*) THE SAME, AFTER EXCAVATION AND REPAIR.

MĀṆḌŪ: THE HINDOLA MAHAL.

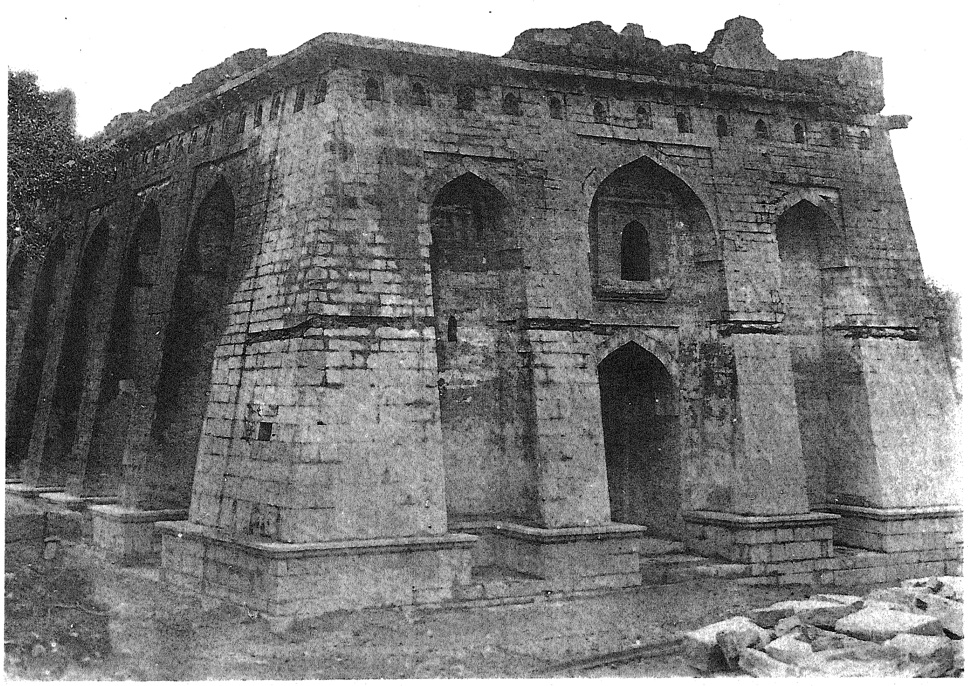


(*a*) MAIN ENTRANCE AT NORTH END, EXCAVATED.



(*b*) SOUTH END OF BUILDING, CONCEALED BY STRUCTURE OF LATER DATE.





(*a*) SOUTH END, AFTER DEMOLITION OF LATER STRUCTURE.

(*b*) THE SAME, REPAIRED.

east end of the Darbār Hall. Trial pits proved that these were of later date, probably alterations made in A.D. 1617, when Jahāngīr visited Māṇḍū. Plate XIV (*b*) shows this door with the original steps leading up, instead of down, to the floor of the building. The trial pits also brought to light the original plinth, 4′ 9″ in height, of which formerly nothing was to be seen. Extensive excavations were, therefore, undertaken and the ground cleared down to the base of the plinth, for about 40 feet all round. The plinth, especially on the eastern side, was found to be in a wonderfully good state of preservation. In Plate XV (*b*) we see the southern end of the building, as it was, covered with a rubble structure of later construction, probably also of Jahāngīr's time, which connected the Hindola Maḥall with the adjoining Jahāz Maḥall. Fortunately this rubble masonry had not, to any large extent, been built into the original walls, and it was, therefore, possible to remove it without damaging them. Plate XVI (*a*) shows the intermediate stage, with the south-west corner dismantled for reconstruction, owing to damage done by vegetation; while the succeeding picture shows this southern face as it now stands restored to its original form.

I may here remark, that on both the eastern and southern sides, the excavations disclosed three distinct levels of concrete flooring above the original plinth level, and on the upper one were the bases of pillars for a colonnade, which at one time had evidently been added on the eastern side. Two copper pice of the time of Maḥmūd Khaljī I. (A.D. 1435-1469) were unearthed outside the south door at the original plinth level. A quantity of mercury weighing 3 lbs. (avoirdupois) was also found on the steps of the second doorway on the east side. It was mixed with the earth and rubbish, which formed the foundation of the later superstructure. It would be interesting to know whether a deposit of this mineral was a usual feature in the foundations of the later Muhammadan buildings. Possibly, on the principle of antithesis, its very fluidity might have suggested its use in the place of the newspaper or coins of our own day.

As regards the work done at the northern end, on the ground floor two store rooms (see plan, fig. 1), which were filled with *dêbris*, have been cleared; the *dêbris* on the northern side, which lay to a height of 6′ or 8′, was also removed; and the handsome archway [Plate XV(*a*)] in the north face was thereby opened out. Remains show that this archway was formerly closed with pierced stone trellis work. The broad easy ramp,[1] leading from the doorway towards the east corner of the north end to the upper apartment, formerly completely choked with *dêbris*, has now been uncovered and one can see how the palanquins of the ladies passed without difficulty up to the Zanana, whence the proceedings in the Hall below could be watched in security.

The dimensions of this upper room are 69′ long, 36¼′ broad and 15′ high. The flat roof was supported by two rows of pillars, 12′ apart; but together with the pillars it has now completely disappeared, only the bases of the latter remaining in some places to indicate where they stood.[2] With the absence of all protection at the top and with the encroachment of vegetation the inner facing of the side walls had in many places fallen. They have now been refaced up to the roof level. The floor of this apartment has also been rammed with concrete to make it watertight.

[1] 7½′ broad, with a slope of 1 in 5.

[2] Mr. Cousens remarks that both roof and pillars were of wood, the former being covered with concrete. [Ed.]

Work is now in progress on the handsome west window of the upper apartment, and it is hoped that all that is necessary will have been done by the end of the current year.

The Tower of Victory and the Khaljī Mausoleum.

Farishtah relates that after his return to Māndū from a victorious campaign against the Rājā of Chitor, Sultān Mahmūd Khaljī[1] built "a school and also a Tower seven stories high, opposite the masjid of Sultān Hūshang."[2] The Tower is also referred to by Abū-l-Fazl in the Āīn-i-Akbarī, though he speaks of it as having eight stories.[3] Again Jahāngīr, in his diary, describes in detail his visit to this Tower, giving its measurements as follows:—

"On this day I went with the Begams to see the *Haft Manzil*. This building was erected by one of the former kings of Mālwa, by name Sultān Mahmūd Khaljī. It has seven floors. On each floor there are four verandahs and on each (floor) there are four small doors. The height of this building is $54\frac{1}{2}$ *gaz* and the circumference is 50 *gaz*. From the ground to the seventh floor there are 171 *gaz* (steps)." In Herbert's Travels there is also mention of a Tower "which is elevated 170 steps, supported by massive pillars and adorned with gates and windows very observable."

Before the initiation of the present operations the mass of jungle, covered with *débris* in the centre of the great platform[4] opposite the Jāmi' Masjid, of which Fig. 2 will give some idea, was regarded as the ruins of this Tower, and the ruin appeared so complete that the main object in clearing the site was the hope of finding marble, which might be utilised for repairing the dome of Hūshang's Tomb. Work had not, however, proceeded far when the lower portion of the marble walls of what had evidently been a remarkably fine building were brought to light, and it was, therefore, decided to proceed systematically with excavation and to clear the whole site. The result by the end of the year is shown in Plate XVIII (*a*).

The work was very laborious The mound of *débris* to be attacked was quadrilateral, about 150′ across each way and in height about 30′, while the *débris* itself consisted of huge masses of masonry, intermixed with large blocks and slabs of marble, the latter of which had to be handled with great care. In all, up to 31st March 1904, 779,000 cubic feet of *débris*, earth, and marble were removed in the course of these excavations.

The remains found showed that, though rough in workmanship, the building had been magnificently decorated. Lined inside and out with marble, the door-ways, windows, and cornices, were all deeply carved and inlaid with jasper, agate, black and yellow marble, cornelian, and other choice stones, while throughout there had been a profuse use of coloured tiles, principally light blue and yellow. The floor of the building, which had sunk about 18″ with the weight of *débris* resting on it, showed the

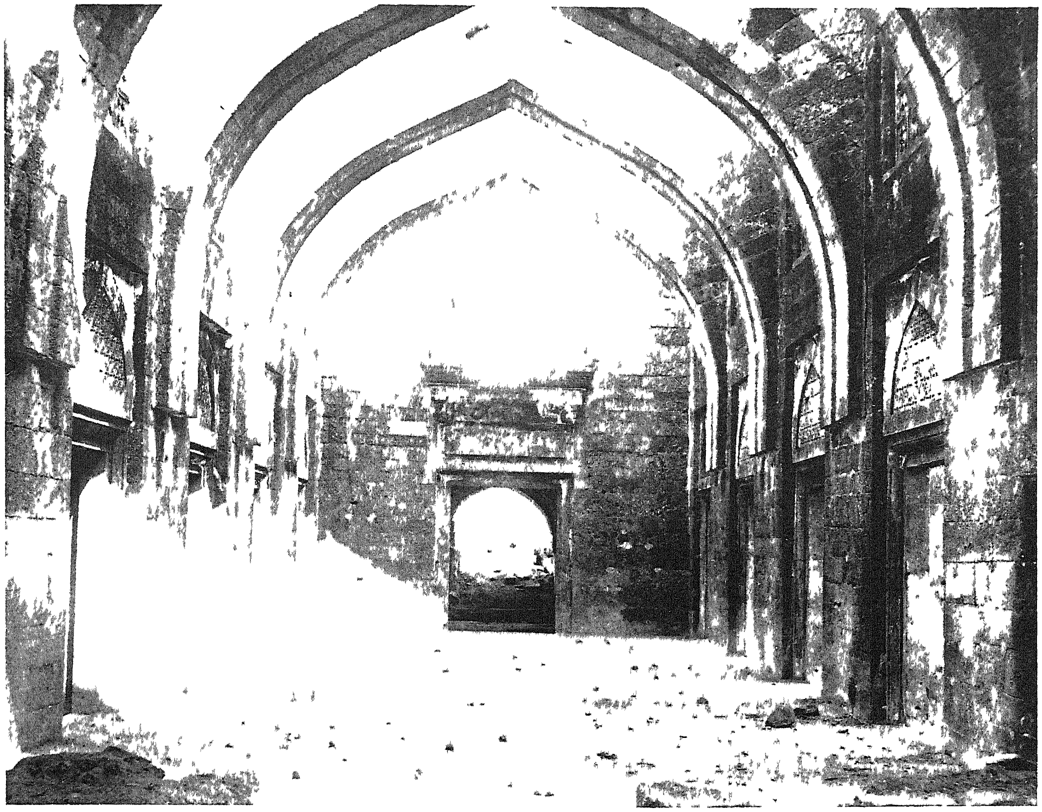
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[1] A D. 1443.

[2] *Cf. Farishtah*, Vol. II, page 488 (Persian ed., 1832), and Briggs' *Farishtah*, Vol. IV, page 210. Briggs records the fact as follows:—"Sultan Mahmud * * returned * * to Mandu, where he built a beautiful pillar seven stories high *in front of* a college which he founded opposite the Musjid of Sultan Hoshang." In the Persian edition, however, it is clearly written as in the text above, and the correctness of this is confirmed by the excavations now in progress (*see infra*)

[3] Vol II, page 181, Persian 2nd ed.

[4] This really was the college founded by Mahmūd.

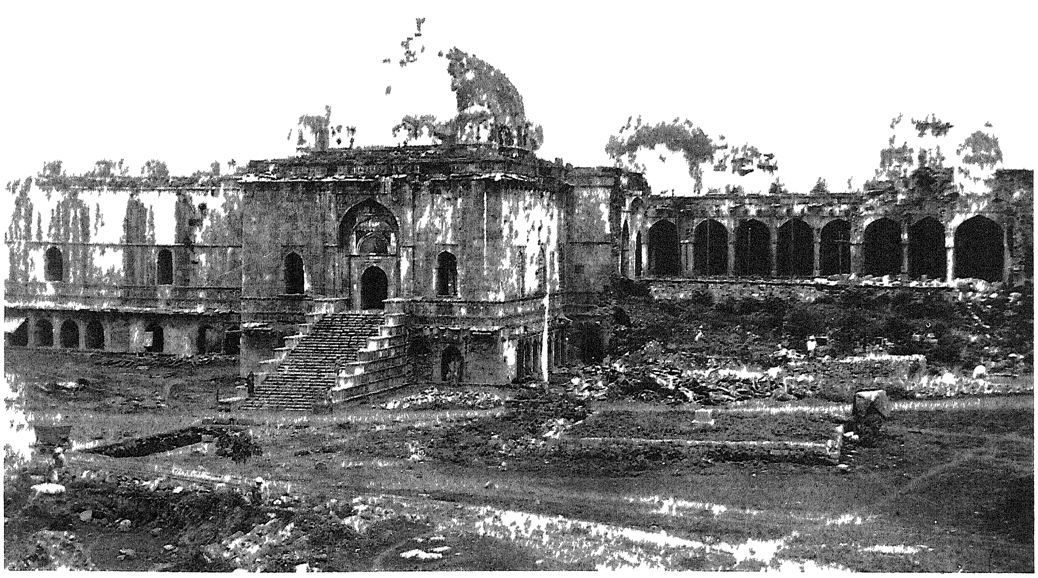




(a) INTERIOR OF HINDOLA MAHAL: LOOKING NORTH.

(b) GENERAL VIEW OF THE TOMB OF MAHMŪD (?) BEFORE EXCAVATION, WITH ASHRAFĪ MAHAL IN FOREGROUND.





(*a*) EXCAVATED TOMB OF MAHMŪD KHALJI (?) FROM N W
(*b*) THE JAMI' MASJID, FROM THE EAST

remains of 9 tombs. One of these was a solid block of white marble, and, except for one corner being broken, was almost undamaged, though it had been pushed laterally some 6 feet out of its place. The other tombs which were elaborate structures of white, black, and other coloured marbles, especially the three principal ones, which lay head to toe from north to south, and the fourth which is close to and east of the central one, were found crushed almost level with the ground. A careful plan of the floor having been taken, it was raised to its proper level, and is now being repaved with the old stones, the position of the tombs being accurately marked. This relevelling was primarily necessary in order to carry off rain water.



Fig. 2

The following Persian inscription was found in the centre window on the eastern side of the building :—

برتماشائیان آسمان فیروزه رواق پوشیده نماند که در زمان دولت و سلطنت حضرت خلافت
پناهی ظل اللّٰه جلال الدین محمد اکبر بادشاه غازي فقیر حقیر محمد طاهر بن جمال الدین حسین
ابن سلطان علي سبزوارے توفیق تعمیر این بنای عالی یافت در ماه محرم سال هزار چهارده
سنه ۱۰۱۴

Translation :

"To the beholders of the blue sky let it not remain hidden that in the time and reign of the representative of God, Jalālu-d-dīn Muhammad Akbar Bādshāh Ghāzī, the beggar Muhammad Tāhir, son of Jamālu-d-dīn Ḥusain, son of Sultān 'Alī Sabzwārī, by the favour of God erected this great building in the month of Muharram 1014 (A.D. 1605)."

Though it is claimed from this inscription that Muhammad Tāhir[1] was responsible for the erection of this building in 1605 A.D., it is perfectly clear from internal evidence, such as the position of the inscription itself and the red sand-stone work that surrounds it, that repairs only were effected at that time, especially to the eastern

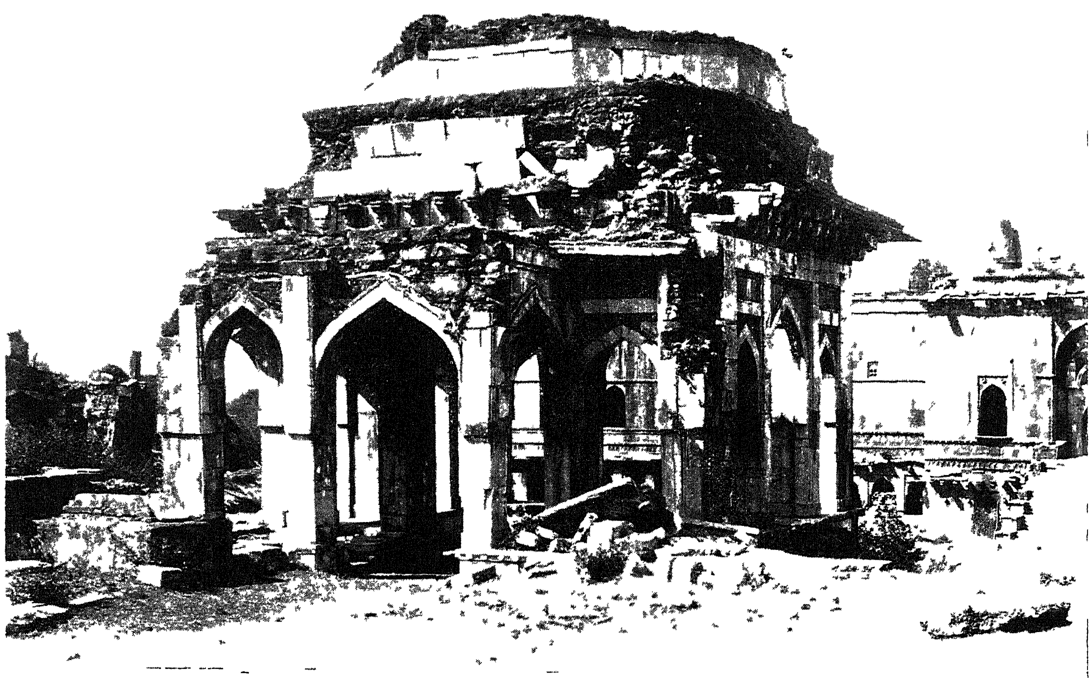


Fig. 3

side. Unfortunately no inscription has been found showing the date of the original construction

With the base of this building cleared, and Jahāngīr's measurements of the *Haft Manzil* before us, it is no longer possible to regard this ruin as Mahmūd's *Haft Manzil* or Tower of Victory, and we can only assume that it is the tomb of the Khaljī dynasty, and that it is here that Mahmūd himself, his father Malik Mughīth, and his successors Ghiyāthu-d-dīn and Nāsiru-d-dīn were buried. Abū-l-Fazl mentions[2] the

[1] Another inscription of his, dated in the same year, is to be seen at the Tārāpūr gate, similarly recording the repair of that structure and road.

[2] *Āīn-i-Akbarī*, Vol. II, page 181, 2nd ed., Persian

Tomb of the Khaljīs, apart from that of Hūshang, as being one of the sights of Māndū, and, in Herbert's Travels, also, there is mention of a tomb "in which four kings are buried," but curiously enough Farishtah makes no special mention of the Khaljīs' tomb This is all the more strange as the building, now uncovered, must have been the most striking of its kind in Māṇdū, far surpassing in size, position and decoration the tomb of Hūshang.

It stood on a great platform (267′ 6″ north to south by 261′ east to west) the top of which was 27′ above the ground level. An easy ramp led up to a very handsome marble entrance porch, now locally known as the Ashrafī Mahall (Fig. 3). At each corner of the platform were round *bastions* and it will be

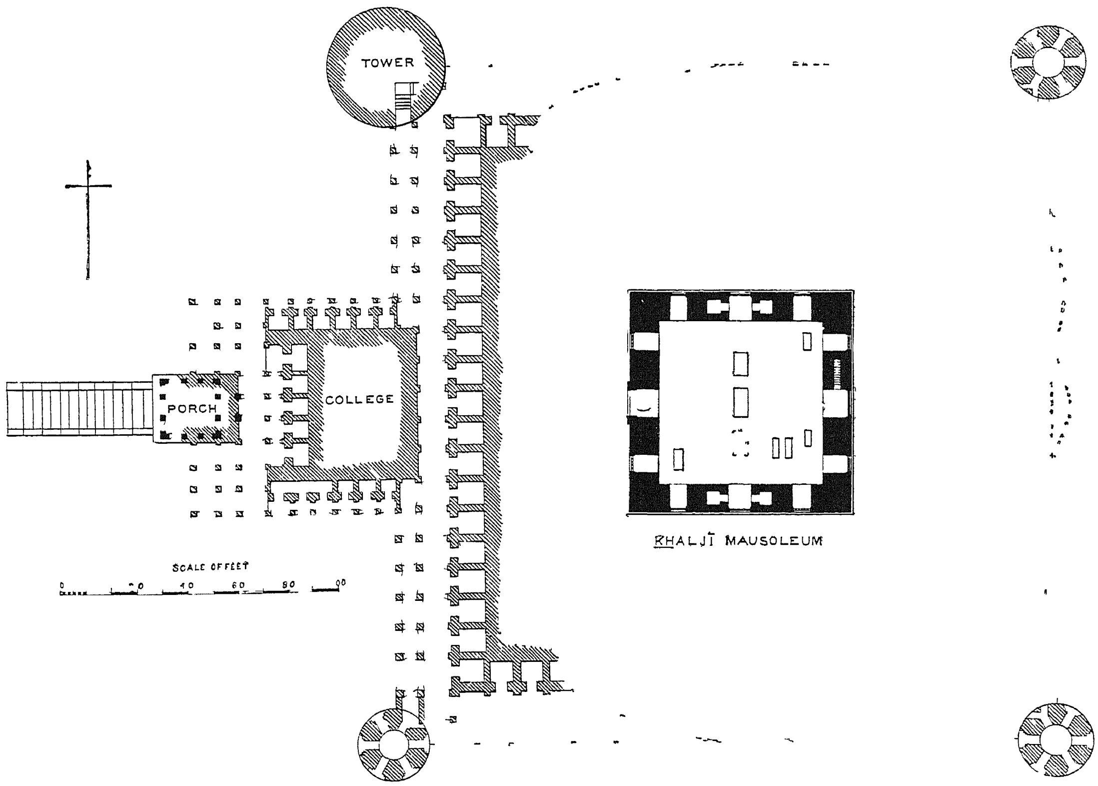


Fig 4

noticed from the plan (Fig. 4) that the base of the *mīnār* at the north-western corner was much larger than any of the others. The circumference of this *mīnār*, which Mr. Cousens identifies with Mahmūd's *Haft Manzil*, is 157′ at the ground level, and, considering the slope of the walls, it would closely approximate to a circumference of 50 *gaz* [1] at the level of the platform. A stair-way leads upwards from the ground inside the Tower, but the ruin of the *mīnār* above the platform is so complete, that there is nothing to guide us onwards.

Considerable excavations have also been carried out on the ground-level of the western face of the platform on which the Mausoleum stands, and, as in the case of the Hindola Mahall, a fine plinth 4½′ high, has been brought to light, the base of which is some 6′ below the former ground-level and at the same time some 5′ below the level

[1] The *gaz* is taken as the *Ilāhī gaz* of 33 inches.

of the base of the plinth of the Jāmi' Masjid opposite. In the course of these excavations, 106 copper coins were found buried in the ground, at the south-western corner of the plinth. They are typical Gujarāt coins and date from A.H. 937-941 (A.D 1530-1534), during which time, it will be remembered, Māṇḍū was in the hands of Bahādur Shāh of Gujarāt.

The excavations round the platform were only commenced late in 1903-04 and are still in progress, as also is the repair of the entrance porch at the top of the ramp. The ramp itself was restored last year, the original steps being uncovered at the same time. Plate XVII (*b*) gives a general view of the ramp and entrance porch before their repair.

Having described the actual work done, it will not be uninteresting to consider in a little more detail the new hypothesis as to the identity of this great ruin. As regards the centre ruin, there can hardly be any doubt that it was the Mausoleum of the Khaljīs, though it is passing strange that this magnificent structure should have received such scant attention at the hands of ancient writers. This is the more remarkable, when we consider the unanimity with which all writers have glorified the *Haft Manzil*, which, on our present assumption, stood less than 50 yards away. The base of the Tower, as has been already remarked, approximates closely to Jahāngīr's measurement, and there is nothing, in his description of it, incompatible with its identification as the *Haft Manzil*. The stairs leading from the ground floor are each 9″ in height and 170 of them would give the height of the 7th floor as 128¼′ or 13′ below the top of the building, which according to Jahāngīr's measurement was 141½′ high. Though the base is of perfectly plain sand-stone masonry, the excavations now in progress show that the Tower was not without decorative features in its upper portions. The main structure was undoubtedly of red stone throughout, but there would seem to have been a string course of marble at each floor, and numerous slabs of sandstone have been dug up, inlaid with white, black or yellow marble in the form of small *miḥrābs*. In addition, diamond-shaped pieces of black, white and yellow marble have been found with the *débris*, and also the capitals of pillars, probably belonging to the balconies.

In these circumstances, it would seem that this ruin may safely be identified with the *Haft Manzil* of Maḥmūd Khaljī; but there is still another point that deserves notice. The excavations show that the ramp and entrance porch, and hence probably the Mausoleum itself, are later constructions than the platform and the Tower. The foundations of both of the latter are separate from, and lower than, those of the ramp, which, it would seem, was built up against the entrance to the original building, while the colonnades, over which the entrance porch has been built, are at this point filled up with rubble masonry, evidently in order to carry the weight of the structure above it. It is, moreover, only by this hypothesis that we can explain the total absence of any steps leading to the floor of the platform, which must have been originally 4½′ above the ground level.

Thus the explanation of the whole matter seems to be that what I have hitherto called the platform is in fact the College, which along with the Tower was built by Maḥmūd Khaljī opposite the Jāmi' Masjid on his return from Chitor in 1443, and that at a later date, in the absence of a suitable central site, the College building and the

Tower were utilised as a splendid frame, existing ready to hand, in which to set the Mausoleum. The weak foundations thus obtained explain why the Mausoleum itself, a building in every way apparently as massive as Hūshang's Tomb, should have required extensive repairs within 150 years of its erection, and also account for its final disappearance. The fall of the Tower may, perhaps, be ascribed to the shock, which the falling tomb must necessarily have given to the whole structure.

Hūshang's Tomb.

The inscription, which evidently once existed over the main door-way of Hūshang's Tomb, has disappeared, but Farishtah notes [1] that in A.H. 843 (A.D. 1439) Maḥmūd Khaljī undertook "the building of the Tomb and Mosque of the late Sulṭān Hūshang and completed them in a short time."

During 1903-04, the actual restoration of the dome, which is the important work to be done here, was not commenced, but some considerable sums were laid out in collecting marble for the undertaking. Since April 1904, however, work on the dome has been started and is now proceeding rapidly and satisfactorily. Close inspection shows that practically the whole of the marble covering will have to be removed and rebuilt, as the outer shell of the dome, on which the marble lies, has, in many places, come away from the inner shell, which carries the inner lining of marble. To give greater solidity to the new work, a solid block of marble is being occasionally carried through from the exterior to the inner shell and tailed into both, thus bonding together what in the original design were practically two separate structures.

The uprights of the door-way of the Mausoleum, parts of the walls, and two of the curb-stones of the central dais, on which Hūshang's tomb actually rests, had been seriously disfigured by names carved on them. These have been repolished, and in the latter case renewed; one inscription, however, recording the pilgrimage of a Muhammadan to this shrine in A.H. 1070 (A.D. 1659), has been left.

Fergusson describes [2] this building in his History of Architecture, but his description can hardly be called accurate. He remarks that the light is only admitted by the door-way and two small windows; whereas, in addition to the windows on either side of the south door, three large pierced marble screens exist on the north side. He also refers to the fine Dharmaśālā which fills the western side of the enclosure, and remarks that the stones, with which this is made, were either borrowed from a Hindu edifice, or formed by some native architect from stones originally Hindu. I agree with Mr. Marshall in thinking that this Dharmaśālā must have been newly erected at the time the tomb was constructed, and that the stones were cut for that purpose and no other. Each pillar, beam, or bracket, is identical with its neighbour, and, though the designs are apparently Hindu, the execution is such that their Hindu character is completely lost and they have become merely decorative patterns. Again, the porch of the enclosure, which Fergusson states is avowedly only a re-erection of the pillars of a Jaina dome, is in reality of purely Saracenic construction.

Up to the 31st March 1904, R2,283 had been spent on marble collecting, and

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[1] *Farishtah*, Vol. II, page 405, Persian ed. of 1832. [2] *Indian and Eastern Architecture*, page 543.

₨17,000 have been allotted for the current year for restoring, as far as possible, the exterior of the main dome, the corner minarets of the tomb, and the entrance porch. The interior of the dome will also, it is feared, require attention in the near future, as, owing to the rusting of the iron clamps, the marble slabs have, in many cases, flaked off. Estimates for these repairs are now under preparation. In addition, the roof of the Dharmaśālā is to be made watertight with a layer of concrete, as soon as possible. When this has been done, the whole edifice will, no doubt, stand for many generations to come.

The Jāmi' Masjid.

Commenced by Sulṭān Hūs͟hang and completed by Maḥmūd K͟haljī (*circa* A.D. 1440), the Jāmi' Masjid is undoubtedly the finest structure in Māṇḍū. A good de-

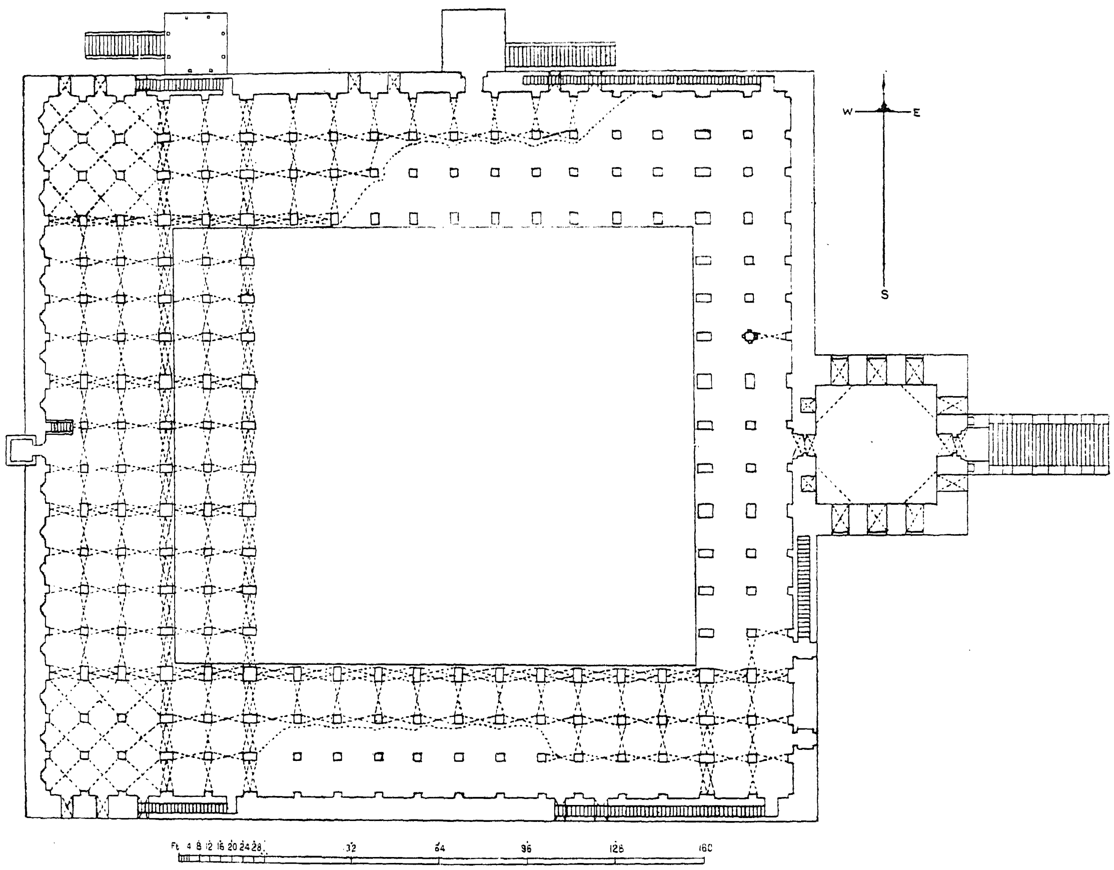
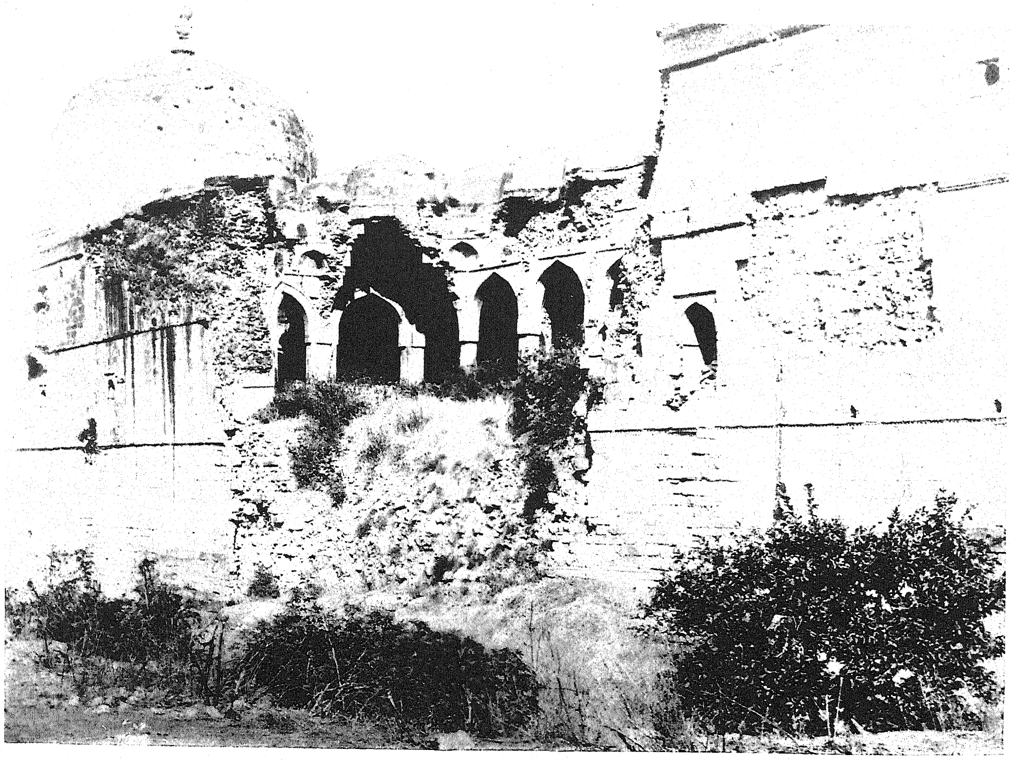


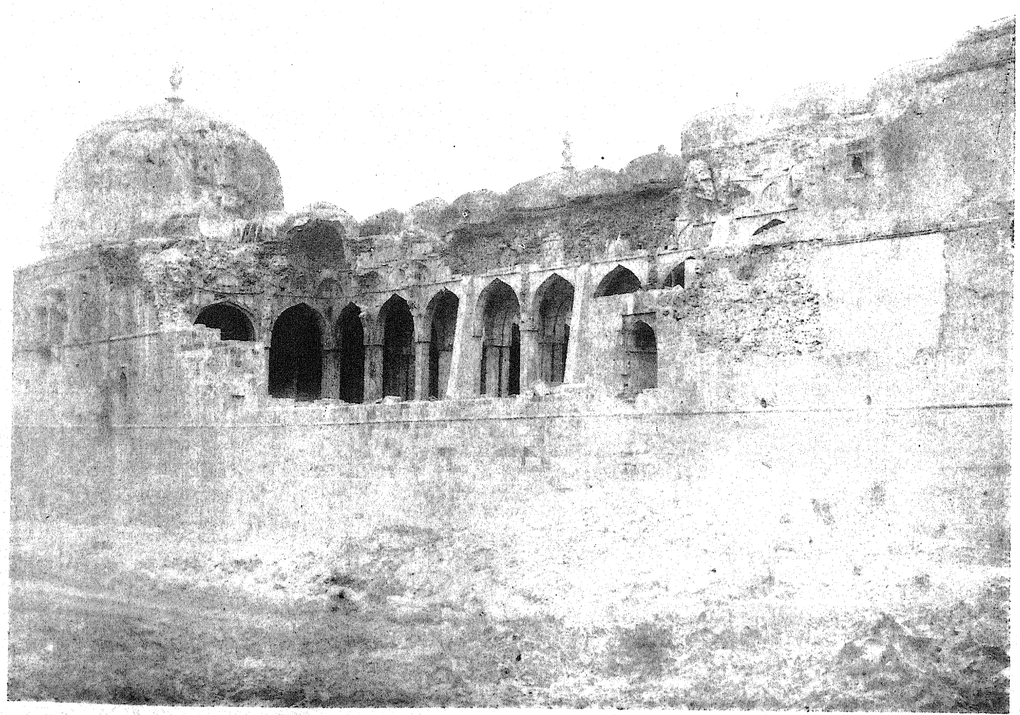
Fig. 5.

scription of it may be found in Fergusson's "History of Architecture."[1] Fig. 5 and Plate XVIII (*b*) show the plan and general view of the building from the east.

The interior walls and pillars are throughout faced with the pinkish red sand-stone mentioned in connection with the Hindola Maḥall; the exterior is mostly of the same

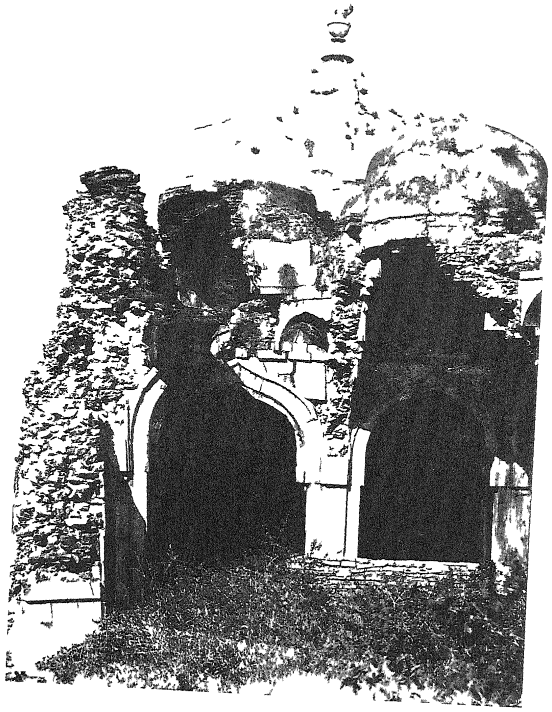
[1] *Op. cit.*, page 541 *sqq.*

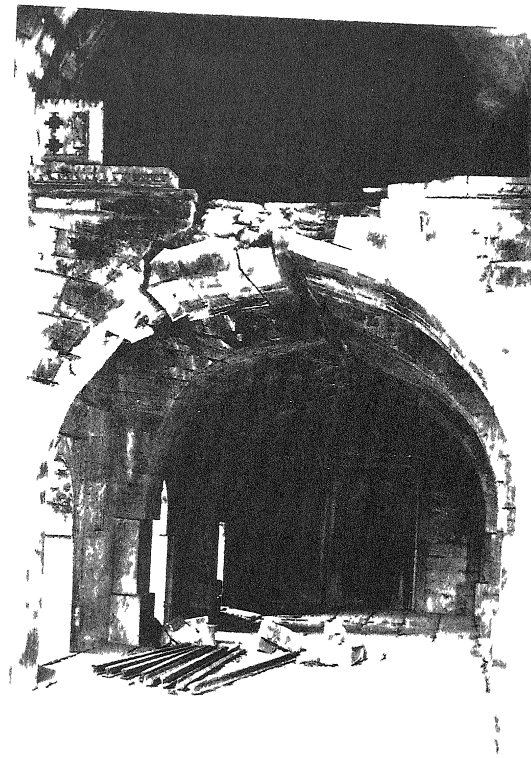




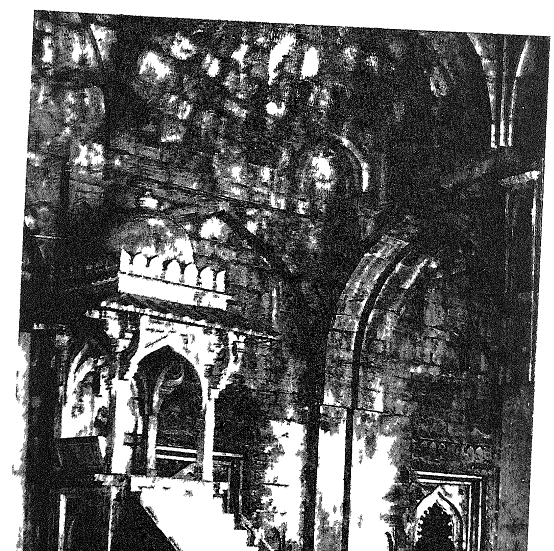
(a) GREAT GAP IN THE SOUTH WALL.

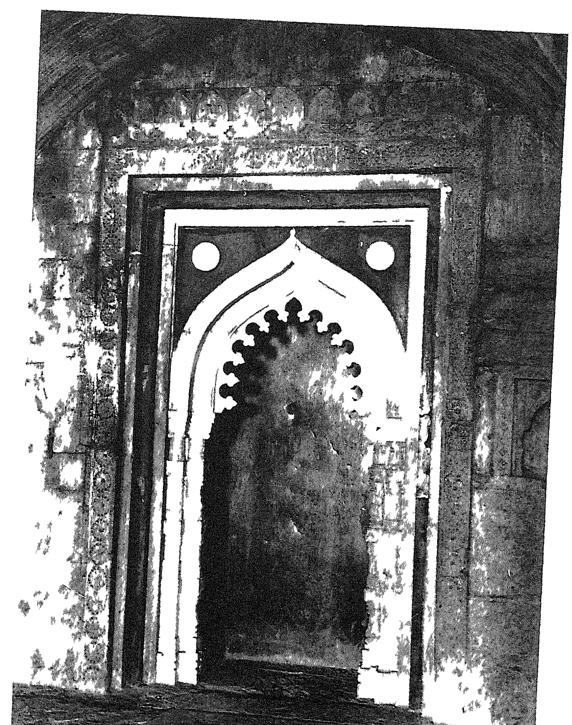
(b) THE SAME, AFTER PARTIAL REPAIR.





b





d

(*a*) CRUMBLING MASONRY IN THE SOUTH DĀLAN, BEFORE REPAIR

(*c*) THE MIMBAR, OR PULPIT

(*b*) THE SOUTH TAKHT BEFORE REPAIR LOOKING WEST

(*d*) ONE OF THE RESTORED MIHRĀBS

stone, but occasionally large blocks of laterite have been used, and the plinth is entirely faced with these. Repairs, both internal and external (some of them very good), have been effected in former times with sand-stone, but in one case, unfortunately, with bricks. The great eastern porch, which stands out massively from the mosque enclosure, and the pierced screens, which in several cases still fill the windows, are worthy of notice. Most impressive, however, is the main prayer chamber with its five lofty arcades and seventeen marble *miḥrābs*, with platforms at the north and south ends, supported on masonry vaulting of wonderfully perfect finish.

The whole of the arcades on the east side of the quadrangle, nearly all on the north side, and two of the three on the south side have, unfortunately, fallen in. There is a great gap, also, in the main wall of the quadrangle, on the south and east sides. In many places, the sand-stone facing had come away, while in the prayer chamber itself the beautifully carved *miḥrābs* and the *minbar* were in urgent need of repair. The reconstruction of the fallen arcades was obviously impossible, and it was, therefore, decided to confine the work to :— (1) repairing the roof, so as to render it watertight; (2) restoring the *miḥrābs* and *minbar*; (3) reconstructing the south plinth up to the level of the *dālān*; (4) reconstructing the southern platform (*takht*), and simultaneously strengthening the south-west corner of the building; (5) strengthening the single arcade remaining on the south side, by dismantling certain ruined domes and a small portion of the south wall, and by the construction of buttresses.

The restoration of the *miḥrābs* was the first thing to be undertaken, and all have now been repaired. Plate XX (*d*) exemplifies the work done in this connection; on account of the expense, we have refrained from reproducing the more minute details of the carving, but the general outline has been strictly preserved. The white marble *minbar*, which bore a thin coat of plaster, has been cleaned, and two new marble brackets inserted to support its *chajjas*. The marble rosettes, which had, in almost every case, disappeared from the spandrils of the *miḥrābs* and the *minbar*, were also renewed throughout.

Repairs to the sand-stone facing of the interior of the quadrangle were commenced, and the side parapets of the stairway, at the main east door and at the entrance porch on the north side, have been rebuilt in cut-stone. Work was also begun, late in the year, on the gap in the wall on the south side [Plate XIX (*a*)] and this has now been built up to the level of the *dālān*. The dismantling of portions of the upper structure, and the construction of buttresses, have also been carried out. The photo. on Plate XIX (*b*) shows the work done up to July 1904. The second external platform on the north side was also rebuilt to the level of the *dālān*.

Finally, as far as funds permitted, careful repairs with cement and mortar were made to the small domes of the prayer chamber, with the satisfactory result that leakage from the roof is now reduced to a minimum. To render the building, however, permanently watertight, the whole of the flat portion of the roof should eventually be covered with a 3″ layer of concrete. All the masonry work, it should be added, has been done with great care, so as to harmonize, as far as possible, with the original structure.

Work is now in progress on the buttresses [*cf.* Plate XIX (*b*)] intended to support what remains of the south arcade, in which, also, supporting arches are being built; and,

as soon as these have been completed, it is purposed to undertake the reconstruction of the south platform [Plate XX (*b*)] which has cracked with the subsidence and bulging of the south wall. A certain amount of facing masonry, both internal and external, also remains to be done.

Jahāz Maḥall.

Situated on elevated ground, between two ancient tanks, the Jahāz Maḥall is the central and most conspicuous building in the Palace enclosure. At some period it was

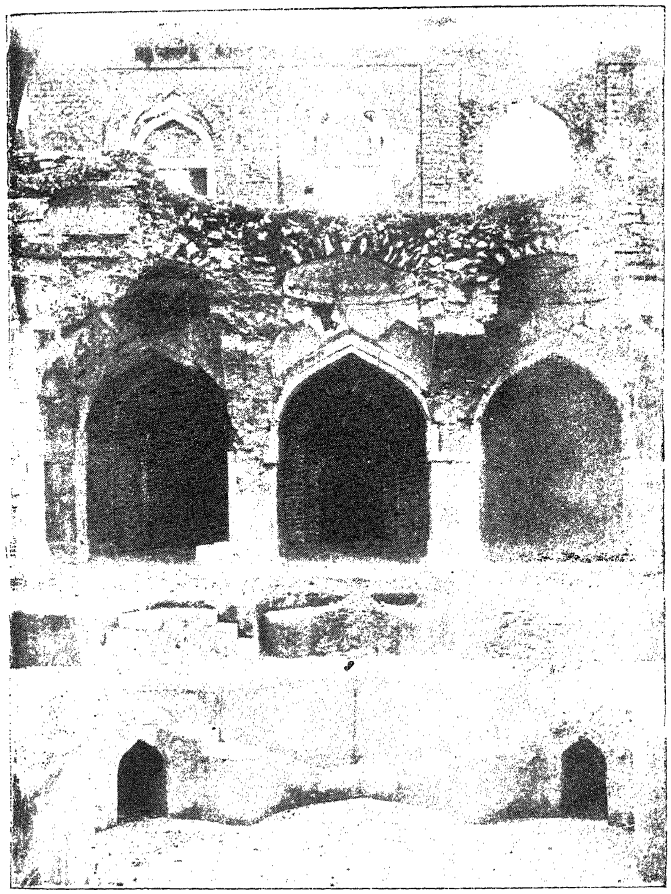
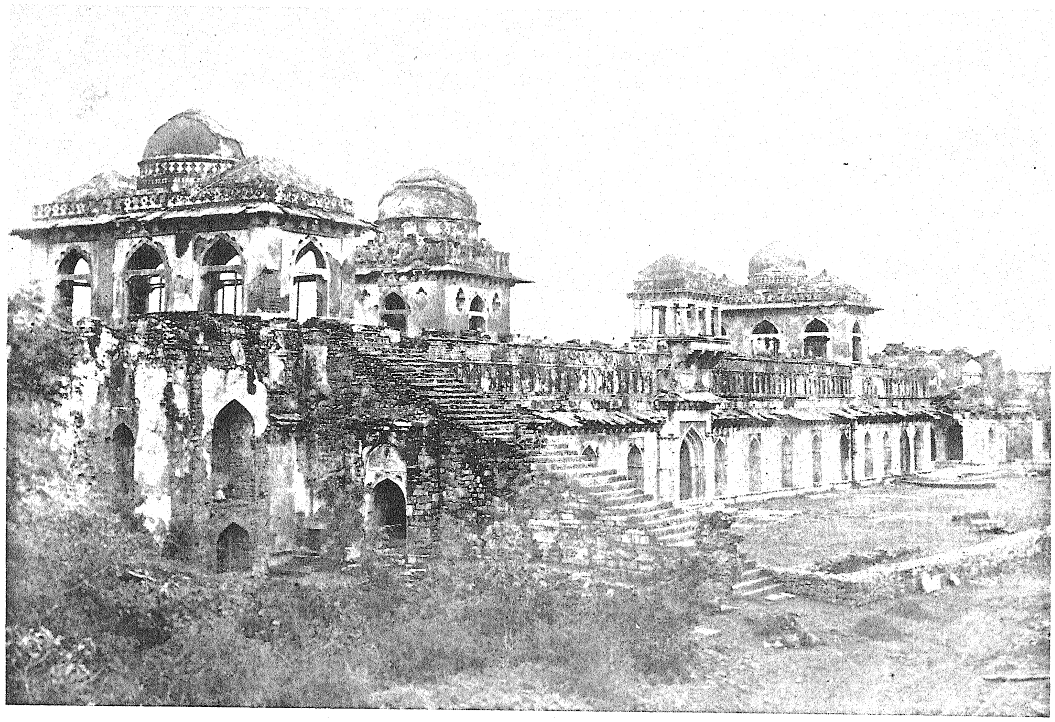
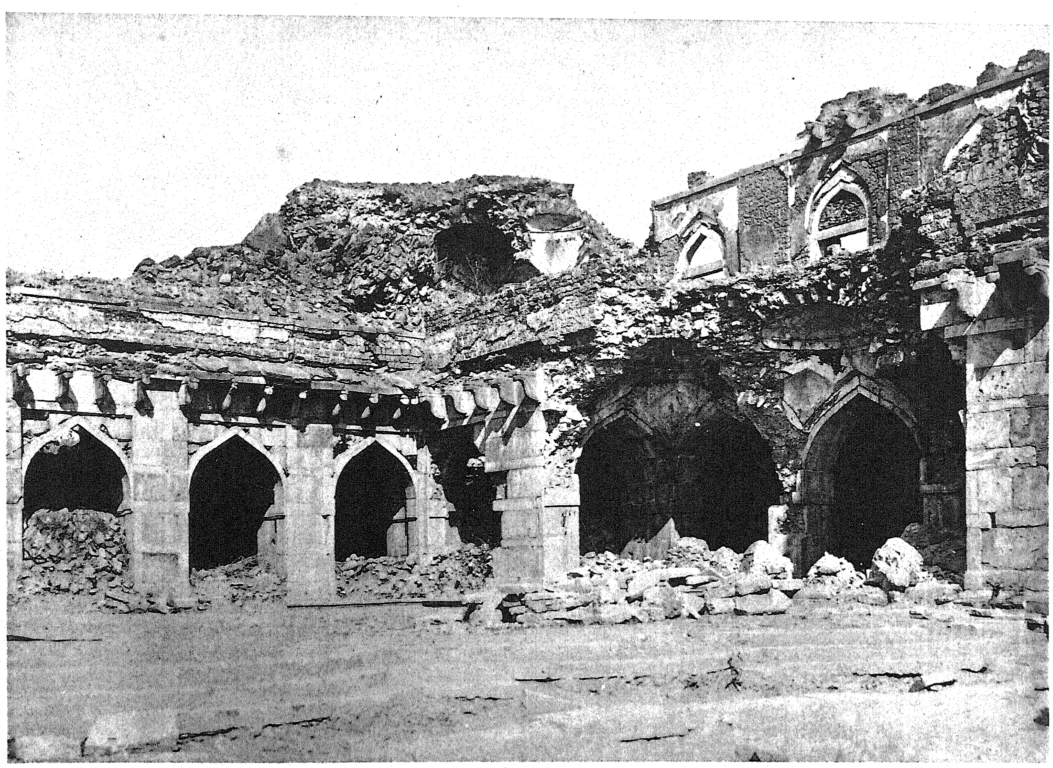


Fig. 6.

evidently connected with the Hindola Maḥall, but originally, as the numerous water channels, traces of which are to be seen throughout the building, attest, it must have been a " Water Palace " in the true sense of the word, quite distinct from the Hindola Maḥall. Plate XXI (*a*) gives a general view of the east façade, which is 360 feet long.

The work done on this building during 1903-04 was not so extensive as elsewhere. The ground in front of the east façade was removed to an average depth of about one foot, thus disclosing the original plinth, with portions of paved flooring and water channels. Two large subterranean vaults, opposite to the north and south ends of the façade, were brought to light by these excavations. The stairway, which leads to the





(*a*) GENERAL VIEW OF BUILDING FROM S.E.
(*b*) COURTYARD AT NORTH END WITH ORNAMENTAL TANK.

roof at the south end, is built over one of these vaults, thus confirming Mr. Marshall's view that it is a later addition, probably of Jahāngīr's time. The courtyard [Plate XXI (*b*)] at the north end of the building was formerly completely filled with *débris*. This was cleared, and since the close of the year a finely designed ornamental reservoir has been discovered (see plan, Fig. 7). The western arches of this courtyard having also been cleared, there is a great improvement in the general aspect of this portion of the ruin. The reservoir just mentioned had evidently been deliberately filled with rubbish at some previous time. The sides, which are of plaster, as also the stone-topped steps leading to the bottom, are in almost perfect preservation, and it is only necessary to edge the upper outline of the tank with stone, to ensure its permanent preservation.

A dry stone wall has been erected at the foot of the sloping ground on the east side of the Maḥall, and level with the road, so as to form a suitable enclosure to the

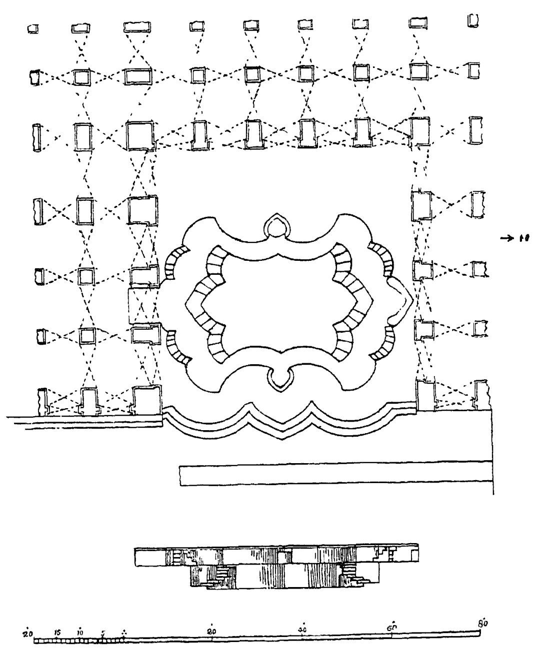


Fig. 7.

building. The roof, too, which leaked badly, has now been covered with a 3″ layer of concrete.

Much might be done for this building, when funds are available, as its façade is well worthy of restoration. For the present, however, the work that has been carried out, especially the repair of the roof, should enable the structure to stand for a long time unharmed.

The Lāṭ Masjid and Kamāl Maulā Mosque, Dhār.

The Lāṭ Masjid, built in A.D. 1405, by Dilāwar Khān, the founder of the Muhammadan Kingdom of Mālava, was extensively repaired during 1903-04. The domes at the east and west of the building, and the roofs of the main prayer chamber and of the colonnades round the quadrangle, were in a pitiable condition. These have

now been thoroughly restored with plaster, as in the original. In this matter, much difficulty was experienced in obtaining a plaster of suitable colouring and texture, but after many experiments a mixture was arrived at, which has all the appearance of ancient work and, at the same time, excellent resisting qualities. The recipe for this composition is given below, in case it may be of use elsewhere :—

Kankar lime	25	seers.
Cement	$2\frac{1}{2}$	,,
Black slag from a brick kiln, roughly ground	$7\frac{1}{2}$	,,
Black colouring matter extracted from cooked fruit of wild pomegranate (*nareti*)	4	chittacks.
Gur	1	seer.
Hemp (*san*)	$1\frac{1}{4}$	seers.

In several places in the colonnades, unsightly brick walls had been erected to support the stone beams that had cracked; these were removed and the beams supported by the insertion of lengths of angle-iron.

The amount spent by the Darbār on this building, during 1903-04, was, approximately, R4,000, and for the current year a further allotment of R4,000 has been made. Work is now in progress on the restoration of the entrance porches. When this has been done, the Lāt Masjid will have been well restored and should stand bravely for many years to come. The structure is of considerable interest, not only on account of the Iron Lāt, which lies outside it and concerning which an article by Mr. Cousens appeared in last year's Report, but also because it is a good specimen of the use made by the Muhammadan conquerors of the materials of the Hindu temples which they destroyed. This is still more evident in the neighbouring mosque of Kamāl Maulā, where not only pillars and building stones from Hindu temples have been utilized, but a large portion of the flooring of the prayer chamber is paved with black marble slabs, formerly covered with Sanskrit inscriptions, and even the lining of the *mihrāb* (Fig. 8) itself was, by a fortunate chance, found to consist of similar slabs, in this case with the engraved faces merely turned inwards and the inscriptions thereon unharmed. The consent of the Muhammadan community having been obtained, these slabs were removed, and the inscriptions are now open to inspection in the quadrangle of the mosque. Their removal entailed the demolition of the entire *mihrāb*, which has now been reconstructed without in any way affecting the beauty of the original design.

As regards the inscriptions themselves, an account of them, kindly contributed by Professors Hultzsch and Pischel, will be found on pages 238-243 of this Report. They are of very considerable archæological importance—the more so as, with the inscriptions discovered some time ago in the Arhāī-din-kā Jhompra at Ajmīr, their subject-matter gives them a unique position among lithic records, and their value is greatly enhanced by the beautiful preservation of their lettering.

I trust that I have succeeded in conveying in this note some idea of the work that has been done and is still in progress in Māṇḍū and Dhār. At times I have felt

serious misgivings as to the feasibility of controlling extensive works of this kind, and it would have been quite impossible for me to do so, but for the guidance available from Mr. Marshall's notes and the sympathetic advice which I have received from him and from Mr. Cousens from time to time. Equally impossible would it have been for

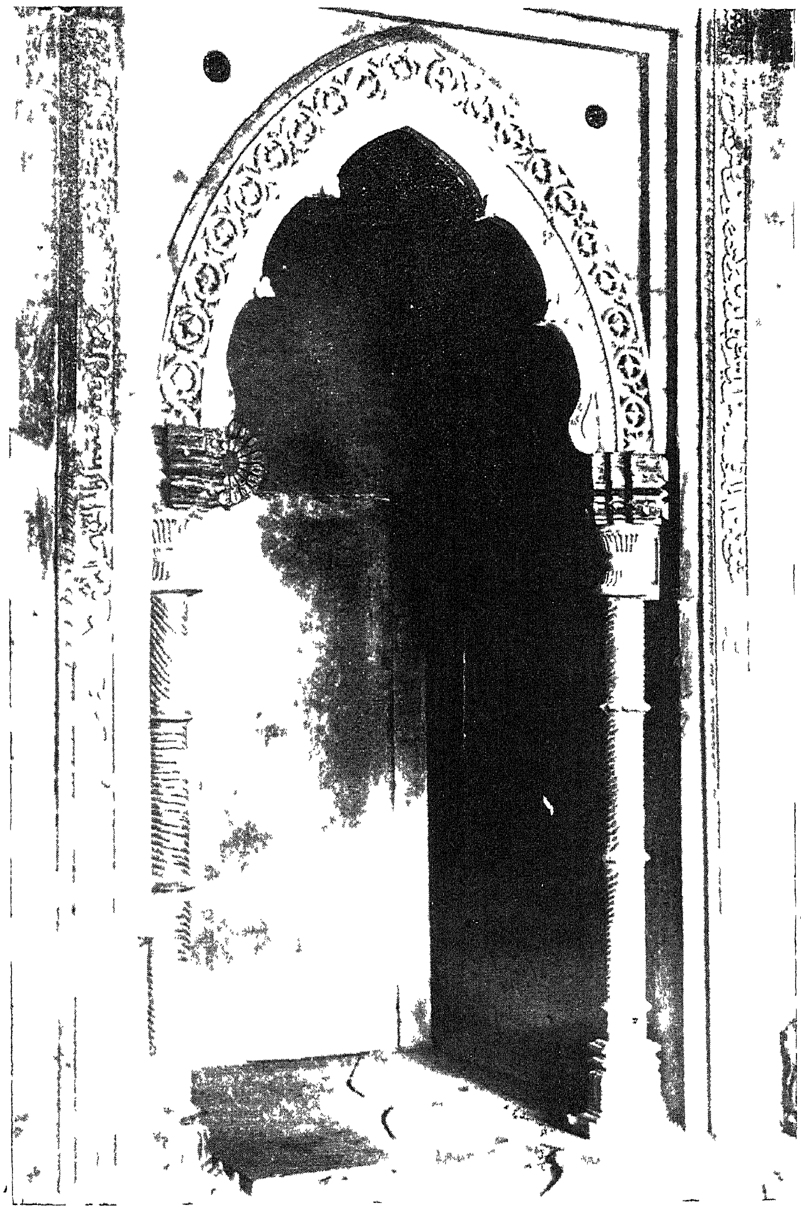


Fig. 8.

me to do anything without the sound practical knowledge which Mr. O'Gorman has brought to bear on the work, and without the unremitting and most excellent services of the Overseer, Mr. Bhim Sinha, who throughout has been in immediate charge at Māndū, and to whom, in my opinion, the greatest credit is due.

E. BARNES.

PROGRESS OF CONSERVATION IN BENGAL.

THE article on conservation in Bengal, published on pages 37 to 59 of the last Annual Report, gave a summary account of all the principal ancient monuments in that province, which are being saved from destruction. At none of the places mentioned in that article has restoration-work yet reached its end, and in addition to what has already been achieved other schemes have been taken up. In the present article, however, I propose to limit myself to a narrative of the progress that has been attained at the Black Pagoda of Konarak, undoubtedly the most important of all the ancient buildings in Bengal, and to a description of two further groups of monuments, not noticed in the former account. The first of these, the temples at Vishnupur in the district of Bankura, exhibit some of the best specimens of the late style of temple architecture in Bengal, which, though indigenous perhaps in its main features, differs from what is found in the adjacent parts of India. and seems likely to have been developed to some degree under Muḥammadan influence. The second group, the ruins of Bagerhat near Khulna, are in the main of historical interest. Lying close to the northern border line of the inhabitable parts of the Sunderbans, they represent the remains of Khalīfatābād, an ancient seat of a provincial governor under the independent Muḥammadan kings of Bengal, one of whom, Khān Jahān, has been shrouded with legends and converted into a saintly Pīr who still continues to work miracles. These ruins afford a proof that parts of the Sunderbans were not at that time so uninhabitable as they became later on, and there are hopes that under the scheme, that is now on foot for reclaiming land in those districts, many an extensive tract of jungle will once more be converted into rich and smiling rice fields.

The Black Pagoda at Konarak.

The beautiful dancing hall in front of the temple could be shown in the Annual for 1902-03 only in its unfinished state, with the lion statues on top, and with all the doors and windows blocked up by stones, to prevent the interior, which then was filled with sand and *débris*, from collapsing. Since that time the lions have been taken down, and the interior emptied. The lions now stand in front of the eastern stair leading up to the dancing hall. Whether this really was their original position, or whether they should have flanked the eastern stair of the main temple, cannot be made out accurately. Fergusson's drawing is not reliable enough in regard to details, and Abū-l-Fazl's

account cannot be depended upon. He leaves out the dancing hall altogether and merely gives a confused description of the *maṇḍapa* and *śikhara* of the temple.[1] In any case, the lions now face the outside of the temple, as they must have done originally.

The interior of the dancing hall has four richly carved pillars, supporting the roof. One of them is illustrated in Plate XXII (*b*). The carvings are of the same type as those on the outside walls of the hall. The four sides of the square pillars have been divided into two galleries, each consisting of a row of five ornamental pilasters, adorned with animal figures, musicians and dancing-girls. Compared with the carvings of the *maṇḍapa*, the absence among them of anything obscene is remarkable. The walls of the *maṇḍapa*, as is well known, are covered with a multitude of human figures of varying sizes, illustrating all the various *bandhas* taught in the Kāmaśāstras. It looks almost as if king Narasiṁha I, who built the temple, had taken a special fancy to that class of Sanskrit literature and for this reason ordered the masons to supply a complete set of illustrations to those books in honour of the god for whom he erected such a magnificent temple. It should, however, be borne in mind that the word 'obscene' and the notion it conveys were unknown to the ancient Indians. In all the productions of Kālidāsa and of many another famous Sanskrit poet are numerous scenes and descriptions, the true meaning of which it would be difficult to explain to an audience of ladies, but there is not the slightest reason to suppose that any one in antiquity took exception either to these or to the realistic carvings of the Black Pagoda. Nothing indeed could be more unjust than to decry the people, who made them, as indulging in immorality, gross as the figures may seem to modern ideas. The subject, however, though well worthy of treatment as an illustration of ancient Indian taste, lies outside the scope of this article. The pillars of the dancing hall are 7′ square and 12′ 8″ high. The walls of the interior of the hall are plain. The lintel of the western door had a beautiful lotus carved on it, with small figures of the sun and planets in the petals, but this stone now lies outside the hall among the *débris*. The roof, which was pyramidal like that of the *maṇḍapa*, cannot be restored.

Leaning against the pillar shown in Plate XXII (*b*) stands a chlorite slab bearing a finely carved image of the sun-god. It measures 6′ 1½″ in height and 2′ 11″ in width, and stands upon an altar or *vedi* of the same stone, 5′ long, 2′ broad, and 1′ high. It does not belong to the image of the sun-god. The god is represented standing under a trefoil arch. His two hands, holding lotus flowers, are broken. His eyes are unfinished. In front of him sits his charioteer, grasping with his left hand the reins of the seven horses, represented along the pedestal, and holding a whip in his right hand. To both sides of the god stands a male holding a shield and sword, and reminding one somewhat of the statues of the two warriors leading horses in front of the southern gate of the *maṇḍapa*. Between the sword-bearers and the god are two small bearded Ṛṣis. Above, on small ornamental roofs, stand two females, and at the bottom of the arch is a small figure of a man on horseback and a seated male playing upon a *vīṇā* or lute. The top of the arch is crowned by a *kīrttimukha*, and on each side is a flying *gandharva* holding garlands. Neither the image nor the *vedi* now stands at the place for which it was originally intended. It has been pointed out by Rai Prasanna Kumar Pal Bahadur, Honorary Assistant Engineer, Pipil Sub-Division,

[1] See Annual Report, 1902-1903, p. 48.

that the fact of the eyes of the god having been left unfinished shows that the statue was never consecrated.[1] At the present day such consecration invariably takes place after the image has been placed inside the sanctum, the ceremony being called *caksur-dāna*, or 'the eye-gift,' in Bengal. The suggestion by the same gentleman that the statue was intended for the sanctum of the main temple seems very unlikely, and it may as well be assumed that it was to be placed inside a minor shrine in the temple court. The fact that the hands are broken shows that the image was damaged during its transport, and the *vedi*, upon which it now stands, exhibits signs of having been cut by some sharp instrument. Apart from this, however, the theory that the main temple never has been finished is likely to represent the truth, and the progress of the work at Konarak will probably furnish additional proof in support of it.

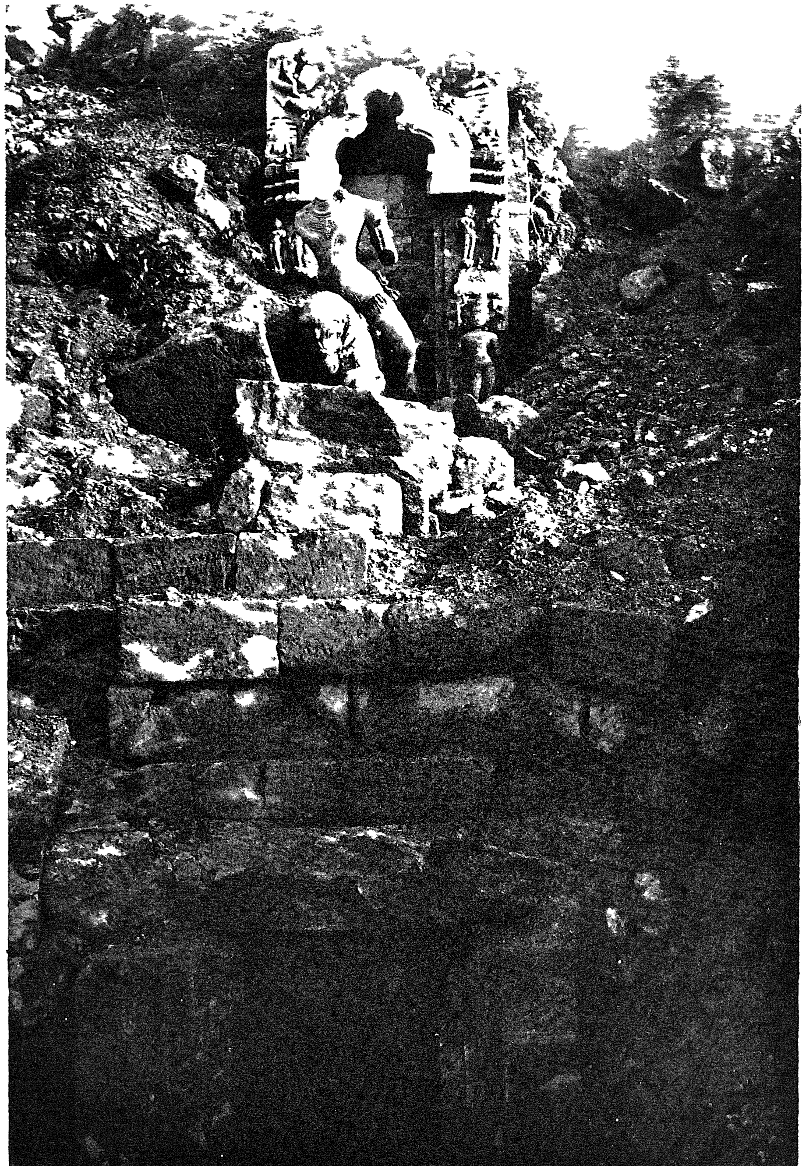
The *mandapa* now affords a spectacle quite different from that shown on Plate VI of the last Annual Report. Its three gates have been blocked up with stones, and the interior has been shut up from view for ever. To fill up the top of it with sand a hole had to be bored through the top piece of the roof, which consists of several huge blocks of stones, joined together and weighing not less than 2,000 tons The thickness of stone through which the boring was made was 25 feet and the hole measured 5 inches in diameter. The loose stones of the roof have been reset, and their broken facings restored by plain work. To get stones to fill up the interior of the *mandapa* some portions of the big heap of *débris* to the west of the *mandapa* have been removed. This accidentally disclosed the interesting fact that about one third of the spire is still to be found standing beneath it. Near the top of the stone heap, on its northern side, the workmen came upon a small chamber, 11 feet long from north to south, and 7 feet broad from east to west. The height of the apex of the corbelled roof from the floor is 11 feet. The door opening to the outside is 5 feet 6 inches high and 2 feet 4 inches wide. A tunnel, 3 feet 3 inches high and 1 foot 8 inches wide, leads to the interior of the spire Above this chamber stands a fine chlorite statue of a man on horseback. Its position had become a little shifted and the head of the man was missing but was afterwards found among the *débris*. The statue seems to represent *Aruna*, the forerider of the rising sun It is shown on Plate XXII (*a*) together with a portion of the opening of the chamber. The walls all around the chamber show the inner courses quite intact, and there can be no doubt that the chamber formed part of the spire in an outside niche of which the statue was placed This discovery goes far to show that the spire collapsed only gradually and slowly, and that the break down of its upper portions did not cause considerable damage to its lower parts. The programme of work for the next year includes the removal of this *débris* west of the *mandapa*, and there is every chance that in unearthing the portion of the spire which remains we shall light upon further interesting discoveries, of which this fascinating ruin has already yielded so rich a harvest.

It should be added that an attempt has been made to plant small trees and shrubs around the temple court, but it will take some time before we can judge whether these will be sufficient to keep out the strong drift of sand which comes sweeping in from the desert.

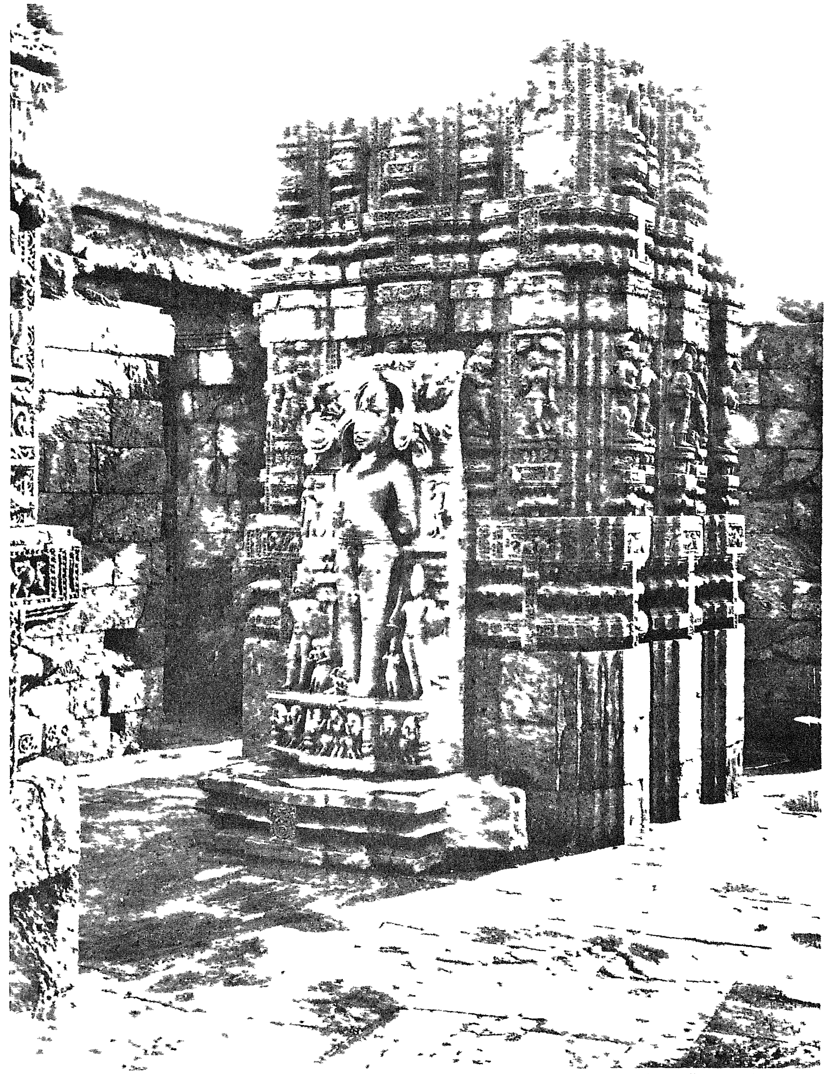
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[1] Mr. Cousens suggests that it may have been intended to add silver plate eyes, as is so common a practice with images [Ed]

BLACK PAGODA: KONARAK.



(a) NEWLY EXPOSED PORTION OF SPIRE



Survey of India Offices Calcutta

(b) PILLAR IN DANCING HALL WITH STATUE OF SURYA.

The Temples at Vishnupur.

The city of Vishnupur, an important trade centre in the district of Bankura, was the seat of a family of Malla Rājas, who had come down there from the north-west, and whose name curiously reminds one of another Rajput clan, who played an important part in the history of Buddha. The Vishnupur Rājas considered themselves important enough to establish an era of their own, which went by the name of *Mallābdāḥ* or *Malla-Śaka*. It is employed in all the twelve temple inscriptions that still remain at Vishnupur, and the title deeds of the Rāj, which are now preserved in the Government offices of the district head-quarters at Bankura, are said to be dated in the same era. From the fact that in one of the temple inscriptions the Malla year 1064 corresponds to the Śaka year 1680, I feel inclined to believe that the Malla era was arrived at simply by reducing the Bengali Fasli year by one hundred. Further details, however, are not available to me, and I cannot pronounce any definite opinion on the true epoch of the era or on other points in connection with it, as the dates of the temple inscriptions do not admit of accurate calculations.

The dates of the twelve temple inscriptions fall between A.D. 1622 and 1758, evidently the flourishing period of the Rāj, which soon afterwards became impoverished and finally was taken over by the British Government. The following list of the twelve inscriptions will be found to differ from that published by Mr. Beglar in Vol. VIII of General Cunningham's Reports (p. 203). As I went very carefully over all the temples in Vishnupur in the company of Babu Shib Das Bhattacharjee, a native of the town, who has made a special study of the history of the Rāj, I can vouchsafe both the correctness and completeness of my list, and the difference between it and the previous one can only be accounted for by the loss of some of the inscription tablets in the mean time.

Date in Malla years.	Name of temple.	By whom built.
928	Malleśvara . . .	Vīrasiṁha.
949	Śyāma-Rāī . . .	Raghunāthasiṁha, son of Vīra-Hamvīrasiṁha.
961	Joṛ-Banglā . . .	Same king.
962	Kāla caṇḍa . . .	Same king.
964	Lālajī	Vīrasiṁha, son of Raghunāthasiṁha.
971	Madana Gopāla . .	Śiromaṇi, queen of last king.
971	Muralī Mohana . .	Same queen, called Cūḍāmaṇi in the inscription.
1000	Madana Mohana . .	Durjanasiṁha.
1032	Joṛā-Mandira . .	Probably Gopālasiṁha.
1035	Rādhā-Govinda . .	Kṛṣṇasiṁha, son of Gopālasiṁha.
1043	Rādhā-Mādhava . .	Cūḍāmaṇi, queen of last king.
Malla 1064 Saka 1680	Rādhā-Śyāma . .	Caitanyasiṁha.

It is not on account of their age or their historical associations that these temples claim the interest of archæologists, but because they represent the most complete set of specimens of the peculiar Bengali style of temple architecture. This style has not yet died out. It will be familiar to any one who has taken a trip up the Hooghly river from Calcutta. All along the banks of the stream one meets with rows of six to twelve tiny little shrines with curved roofs, arranged in a line, and over these rise here and there larger buildings with one to five or even more small towers. The general principle, upon which the last type is arranged, is fairly simple. The temple consists of a square building with a curved roof; upon this rises one tower in the centre, either alone or surrounded by four, eight, and even twenty-four small corner towers. According to their number, the temple is called *pañca-ratna*, *nava-ratna*, etc. The main building has an open gallery generally on three sides only, which surrounds the inner chamber or *ṭhakkur-bāṛī*, the room where the image is placed upon the *vedi* or altar. Stairs lead up to the towers of the roof. The outside walls are covered all over with small carved brick panels, the carvings representing religious scenes, generally from the history of Kṛṣṇa or similar favourite subjects.

In Vishnupur, this type is represented by the temples of Śyāma-Rāī and Madana-Mohana, built of bricks, and by those of Lālajī, Rādhā-Śyāma and Madana-Gopāla, built of laterite. The first temple is perhaps the oldest specimen of the *pañca-ratna* type that exists in Bengal. Nowhere outside Bengal proper has this style of temple architecture been found, and owing to the late date of all the existing specimens it is difficult to decide whether it existed at all in pre-Muhammadan times. The curved battlements of the roof, made in imitation of the roof of the ordinary village hut, certainly must have been peculiar to the architecture of Bengal before the Muhammadans took over the country, for they have introduced it into their own buildings evidently adopting merely one of the characteristic features of the architecture of the country.[1] The art of brick-carving had probably also been developed by the native masons long before the advent of the Muhammadans, as stone generally can only be procured from great distances in the alluvial plains of Bengal. On the other hand, from the fragments of indigenous Hindu carvings used as building materials in the mosques and tombs at Gaur and Pandua it may be surmised that the ordinary Northern Indian style of temple architecture was not unknown to Bengal, and it is quite possible that the idea of the *pañca-ratna* temple to some degree may have been suggested by the form of the Muhammadan *rauza* or tomb with its central dome and four corner minarets. The addition of eight or more corner towers would be quite in accordance with the general tendency to extravagance and the love of excelling what previously existed, no matter whether it meant real improvement in the architecture or not.

Another type of modern Bengali temple is represented by the Joṛ-Banglā in Vishnupur, of which a ground plan and section are shown in Figs. 1 and 2. In general plan it differs little from the previous type. The central *ṭhakkur-bāṛī*, or sanctuary, is surrounded on four sides by a gallery, and has a few small side-chambers, one for the stairs leading up to the tower on top of the roof. But there is a conspicuous difference in the elevation of the main building. As its name *joṛ-banglā* or

[1] See Annual Report, 1902-1903, p. 51.

"double bungalow" implies, it looks like two Bengali huts joined together. The roof likewise has one tower in the centre. The type is not so common as the *pañca-ratna* or *nava-ratna* types, but is found in other places besides Vishnupur. A building like a Bengali hut has also been erected over the tomb of Fatḥ Khān near the Qadam Rasūl at Gaur, which dates from the time of Aurangzeb.

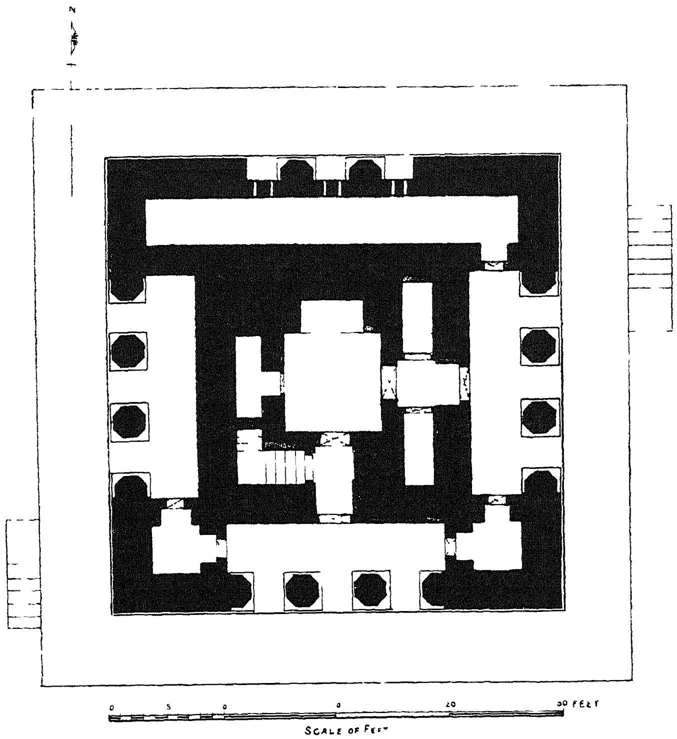


Fig. 1.—Joṛ-Banglā : Ground-plan.

The Joṛ-Banglā temple was repaired a few years ago, but on inspection it appeared that the repairs had been done so carelessly that further restoration work was urgently required. The broken carved brick tablets in the walls had merely been filled up with plaster, and several bad cracks had not been attended to at all. In addition to the Joṛ-Banglā temple, the conservation of the following buildings has been sanctioned: Śyāma-Rāī temple, having the finest specimens of carved tiles; Madana Mohana temple and a brick-faced water-basin north of it, Malleśvara temple, consisting of a square tower only and being the oldest temple in Vishnupur; Madana Gopāla temple, the only specimen of a *pañca-ratna* temple built of laterite stone; and a laterite gate leading to the fort. The total number of temples at Vishnupur being very

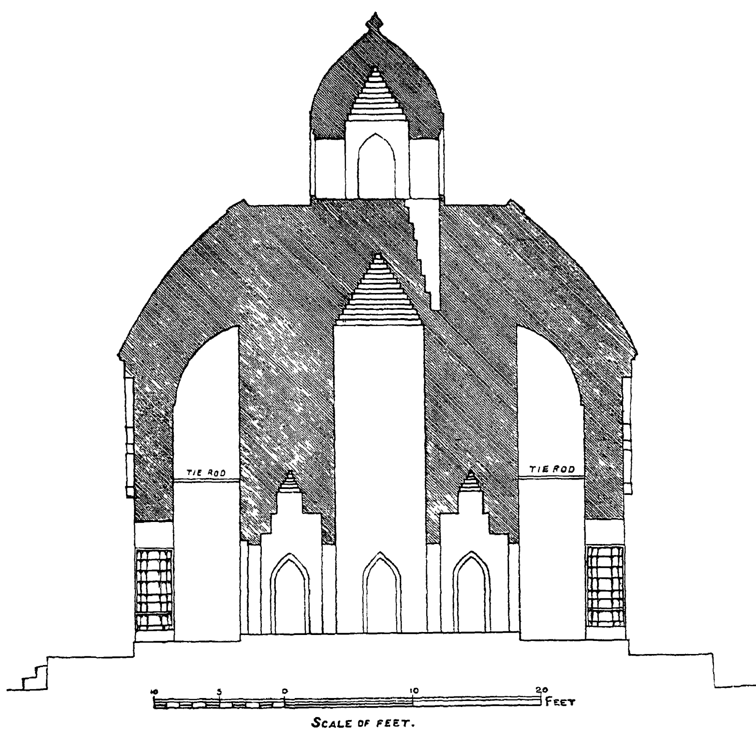


Fig. 2.—Joṛ-Banglā : Section.

large, the Government can only undertake to preserve some of the best specimens of each type. One building which it would be desirable to maintain cannot unfortunately be included among them. It is called Rās-māñcā, a curious structure with many galleries and a huge pyramidal roof, which was used for putting up the idols at the Rās-festival in honour of Kṛṣṇa. It has been so much damaged owing to bad construction that it cannot be restored without practically dismantling and rebuilding the entire edifice.

The ruins of Bagerhat near Khulna.

The modern town of Bagerhat south of Khulna has been identified by Blochmann with K͟halīfatābād, a name occurring as a mint-place on coins of the independent Sulṭāns of Bengal, and the head-quarters of a *Sarkār* or district in the later rent-rolls. It borders close on the jungles of the Sunderbans, and the existence at that place of the seat of a local governor affords a proof that in those days cultivation extended further to the south than at present. The question, sometimes asked, as to whether the Sunderbans were ever generally populated, cannot, I think, be answered by a short *yes* or *no*. The vicissitudes in the political history of the Gangetic Delta, of which so little is known to us, must have been productive of corresponding vicissitudes in their state of cultivation. Already in the fourth century, A.D., the conquests of Samudra-Gupta extended as far as Samataṭa, and a few centuries later the royal family of that country seems to have adhered to Buddhism, as one of them, Śīlabhadra, was met by Hiuen Thsang in Magadha as a venerable old Buddhist scholar. Another native of Samataṭa, Indrabhadra, perhaps a spiritual descendant of Śīlabhadra, put up a fine life-sized image of Buddha at Budh Gaya. Some forty miles south of the modern town of Port Canning stands an isolated brick temple, known as Jaṭer Deul, very likely five hundred and more years old. The country all around it was a thick inhabitable jungle, and only recently has been put under cultivation.

One of the governors of K͟halīfatābād in the time of Nāṣiru-d-dīn Maḥmūd S͟hāh I. of Bengal, after the restoration of the house of Balban to the royal throne, is known to us by his title, K͟hān Jahān only. Popular tradition calls him K͟hān Jahān 'Alī, which the rustic tongue of the Eastern Bengalis has turned into *Khānjā 'Alī*, but the addition of the word 'Alī is not warranted by history. In fact, we know only very little of him. According to the inscriptions on his tomb [1] he died on the night of the 26th Dhī'l-Ḥijja 863, that is the night of the 23rd to 24th October, A.D. 1459, and was buried on the 25th October. He may also, as pointed out by Blochmann, be identical with a certain K͟hwāja Jahān, whom we find mentioned in an inscription from Dacca, the date of which corresponds to the 13th June, 1459 A.D. Beyond this history remains silent, but we may accept as true the popular tradition that besides his own mausoleum he erected the principal mosque at K͟halīfatābād, which now goes by the name of *Sāṭh gumbaz* or "Sixty Domes." What tradition relates in addition to this may be read in Westland's Report on Jessore and in a recent pamphlet by Mr. D. Sunder. K͟hān Jahān appears here as a holy man and a staunch warrior who was sent out by the Emperor of Delhi to conquer the distant country and who worked

[1] See J. A. S. B., XXXVI, 1867, Part I, p. 126.

great miracles and achieved wonderful deeds. Even Akbar is credited with having appointed him. Similar stories of a military conqueror being turned into a Pīr, or of a saint, like the famous Shāh Jalāl of Sylhet, waging war against the infidels, however fabulous in detail, still retain a distant echo of the important political rôle that was played in the earlier centuries of Muhammadan rule in India by saints and leaders of the great spiritual orders.

The tomb of the "Pīr" is a solid brick building, covered by a big dome. Here he lies buried under a stone sarcophagus, resting on several terraces of stone and brick, and covered all over with pious sentences, reflecting on the vanity of human life. "The end is death" (آخر فنا) is the twice repeated refrain of a Persian poem engraved upon the tomb. The floor was covered with glazed tiles of octagonal shape which later vandalism has removed, in spite of the great veneration in which the saint is held. The building is not in great need of repairs and requires but little attention, as it is a splendid specimen of the solid masonry work of those days, to which even the dampness of the Sunderbans affords no real danger.

The same cannot be said in regard to the Sāṭh Gumbaz or mosque of sixty domes. It has in reality seventy-seven domes, *i.e.* eleven rows of seven each, the central row consisting of vaults, but the name seems to have been chosen out of the ordinary Indian predilection for round numbers. It has sometimes been said that the building was no mosque but a sort of Darbār Hall, built by Khān Jahān, but this story deserves as little credit as another tale of his treasures being deposited beneath the floor. There are the usual prayer niches, or *miḥrābs*, in the back wall, which is to the west, and the style is in every respect that of a mosque, the only peculiarity being the great number of domes which cover the roof. A small door leads through the back wall into the interior, as in all larger mosques in India. As it now is, the mosque can only be preserved as a partial ruin and no complete restoration of it is intended. Its masonry is very inferior compared with the tomb of Khān Jahān, and to this is due the greater damage which it has suffered. Provisions, however, have now been made to protect it against further ruin.

The sanctioned amount of the conservation works at Bagerhat is R15,410. This includes a sum of R500 to be paid as compensation for destroying a great number of areca-palms around the Sāṭh Gumbaz mosque, in order to lay its exterior open to view and to fence off the ground around the ruin.

T. BLOCH.

CONSERVATION IN THE CENTRAL PROVINCES.

THE Central Provinces and Berār cannot be said to be rich in antiquarian remains; compared with Central India, its collection is poor indeed. The country has the appearance of having been denuded of most of its ancient buildings; for we find, now and again, stray sculptures and carved stones in odd corners, which indicate the former existence of monuments whose very sites are now obliterated and forgotten. Possibly there still exists many an old relic, of considerable interest, lying hidden away in some of the extensive jungle and little known tracts in the Province, that has not come under the notice of any one capable of estimating its value. The Feudatory States, in particular, require to be properly explored, as they are much less known to us than the regular districts.

Of the eighteen districts comprising the Central Provinces, eight of them contain nearly all the remains of any consequence, these being Sāgar, Damoh, Jabalpur, Bilāspur, Rāipur, Sambalpur, and Chāndā. These remains are chiefly Hindu, but Buddhist and Jaina are also represented. Of first class Muhammadan work there is very little indeed, the old mosques and tombs at Burhānpur being among the few objects of any interest whatever. The most ancient relic, for which we have any reliable date, is the Aśoka edict inscription lying amongst the rocks in the secluded glen of Rūpanātha, in the Jabalpur district, of about B.C. 250. The stone circles, found scattered about in the eastern portion of the Nāgpur district, may be older; but as stone circles continue to be set up by certain primitive tribes at the present day, it is difficult to judge of the age of such, unless assisted by objects that may be dug up within them. Some of them, it is true, have yielded flint arrow heads and axes; and these we may suppose to be pre-historic. Between the Aśoka edict and the Tigowa temple, a few miles distant, of about the fifth century A.D., we find nothing, save an old rock inscription at Sakti, and possibly the Pachmarhi caves, though the latter, I think, are coeval with the Tigowa shrine. At Sīrpur, on the Mahānadī, in the eastern part of the Rāipur district, are images and traces of small Buddhist shrines of about the seventh or eighth century; and, much later, an image of Vajrapāṇi at Tewar near Jabalpur. The earliest Hindu remains, as yet discovered, are those at Erān, in the Sāgar district, of the fifth century, which are followed

closely, within a century or so, by the old brick temples at Śīrpur and other places in the eastern districts of the Provinces; the remains of a small temple at Rāmtek, and an old stone temple at Bhatālā in the Chāndā district. These are but fragmentary remains, now in a sad state of ruin. Later than these come a few examples of the mediæval decorated class of stone temples, also badly ruined, or left unfinished originally, such as the temples at Jānjgir and Pāli in the Bilāspur district, Bherāghāt, near Jabalpur, Nohtā in the Damoh district, Māndhātā on the Narmadā in Nimār and Mārkaṇḍa in the Chāndā district. At various other places are found fragmentary remains of old shrines. Of Jaina remains there is but little left to us, though the frequent occurrence of solitary images, more or less mutilated, show that Jaina shrines were by no means few in olden days. The principal shrines of this faith, now standing, are one at Arang in the Rāipur district, and one at Bhāndak, near Chāndā, both ruinous, the latter being in a very dilapidated state.

With such ruins it is indeed difficult to know what to do. Restoration is impossible, as any attempt at rebuilding would result in new buildings being erected, decorated with the few fragments of the old. It does not do to commence dismantling and rebuilding, for we should only find that half the stones, when taken down, were quite unfit, owing to fractures or disintegration, to be used again. But the same stones will last many years yet in their present condition if strengthened by the judicious use of a little good cement, and this binding and bracing of the loose parts together into larger solid masses, not likely to move, by cement, clamps, and such like means, is about all that can be done, excepting, perhaps, the fencing in of the monuments,—a means of protection of great importance in this country, since it shows the despoiling villager that the building is being watched over by Government. Thus it happens that in the Central Provinces we have no conservation works of any importance going on—nothing but minor works of preservation. A scheme for the repair of most of these remains has already been elaborated and is now in course of execution.

Ordinary Muhammadan work is more or less understood by the Public Works officials who carry out the repairs, but these old fragmentary remains of Hindu buildings are unintelligible to them, and hence the only way to have repairs carried out satisfactorily, is personally to make complete notes upon the spot of every little item of work to be done,, and how it should be done, and to let the estimates be framed upon these notes: To leave anything vague, even down to the manner of inserting a single stone in a particular position, is fraught with danger at the hands of *mistrīs*, to whom the work is, in most cases, entirely entrusted. One has also to keep in mind all possibilities of error, and to specify, therefore, not only what has to be done but also what has not to be done.

In Berār, too, which is now a part of the Central Provinces, antiquarian remains are comparatively few, and are almost entirely confined to the southern districts, practically nothing of interest being found to the north of the railway, save the hill forts of Narnālā and Gāwilgarh. The remains to the south are Hindu and are mostly of the class loosely termed "Hemādpanti" by the people; that is, late mediæval. Buldāna possesses most of these, this part of the country having been well within the influence of the Devagiri Yādavas, who were great patrons of temple

building. In considering these styles of architecture, all modern boundaries must be ignored entirely; and this is why "Circles," as at present settled, and which, for administrative purposes, must be circumscribed by the same, are very awkward for purposes of investigation and conservation, in that they cut into styles and break them up piecemeal. It would be better, if it could be arranged, for each "Circle" to embrace, wholly, certain classes or styles, especially where these are local and comprised within fairly definite areas. As an example of the unsatisfactory nature of the present arrangement I might mention that Mr. Rea, of the Madras Circle, has published a monograph on the Chaulukyan architecture as he has found it in the Bellāry and adjoining districts, whither it has spread from the Kanarese districts of the Bombay Presidency and the northern part of Maisur; while I myself have the material for a similar account of the style as I have found it within my own borders. But how much better it would have been to have had a complete monograph on the whole, based upon notes and material gathered over the entire area covered by it, irrespective of territorial boundary lines!

The heaviest items of work in the Central Provinces, during the past year, have been the repairs to the Muhammadan buildings at Burhānpur, and the improvement of the roofing over the shrine of the old ruined temple of Siddheśvara at Māndhātā. As with most of the Muhammadan kings of the Dakhan, the Faruki kings of Burhānpur seemed to have confined their building energies to the State buildings of their capital, for nowhere else, within the area under their influence, do we find anything of much account. In addition to their mosques, tombs, palaces, and baths, they had here an elaborate system of water-works, now entirely ruined. The finest building here, and one that has withstood the ravages of time and weather in a remarkable manner, is the great Jāmiʿ Masjid. It is a very substantial stone building, but its general appearance is rather marred by the disproportion between the very long low arched façade and the excessively tall *mīnārs* that flank it at its extreme ends. The only repairs required here were the repairs to the cornices of the *mīnārs* where broken, the removal of young *pīpal* trees from the masonry, and the draining and clearing of the courtyard. Another large masjid, known as the Bibi Masjid, of that type where the *mīnārs* rise on either side of the great central arch of the façade, like most of the Ahmadābād buildings, is in too ruinous a condition to warrant much being done to it beyond propping it up so as to keep it as it is, and some minor repairs. In the tomb of Shāh Shujāʿ, outside the town, the walls within have been decorated with a kind of fresco painting, which has become very dirty, and judicious experiments are now being made to see what can be done towards cleaning it. In the old baths, which have been converted into a Dāk Bungalow, there was a great deal of this painting in the groined ceilings, some of which was renovated, years ago, in rather a crude manner. Shāh Nawāz Khān's tomb is a large heavy stone building, and it is here that some of the more important work is being done, principally in the restoration of parts of its overhanging cornice. There is a group of three tombs nearer the city walls, said to be those of some of the Faruki kings, one of them being that of Shāh ʿĀdil Khān. The central and smallest tomb is a complete ruin; to the other two, however, minor repairs are being carried out.

Bats are a very great nuisance in these, as in nearly all such buildings. To

prevent their ingress the open doorways and windows have to be closed with wire netting; and in addition to this, especially where doorways cannot be kept permanently closed, several lengths of fine wire are being stretched across at different heights in the interior. This is a well-known device for compelling bats and birds to evacuate a building.

The work at the old temple of Siddheśvara at Māndhātā was started under special instructions from His Excellency the Viceroy, who visited the place in October 1902. The temple is situated upon the top of the hill, on the island in the Narmadā, above the famous temple of Oṁkāreśvara. It appears to have been left unfinished, but was intended to be a very fine building. As it stands at present, it consists of the square sanctum, with a doorway in each of its four sides, its walls having been carried up almost to the springing of the spire; but the latter seems never to have been built, though many dressed stones lie about prepared for it. To make the shrine usable in later times, an unsightly dome, in Muhammadan fashion, was thrown over it. Standing upon the high platform, out in front of each of the four doors, are the great columns of the surrounding *maṇḍapa* or porches. But here again the work has been left unfinished, the architraves alone lying across the tops of the columns. The removal of the ugly dome, and the substitution of something more in keeping with the old work, was the principal item of work to be accomplished here. To build a sculptured stone spire, such as was originally intended, with its mass of fretwork ornament and minor spires and finials grouped about the main tower, would have been altogether out of the question, both from the enormous cost and our ignorance of the intended design; while to build anything else approximating that in general outline, though plain, would have been false and out of harmony with the rest of the structure. It only remained, then, to remove the dome and introduce a sunk flat roof, which could not be seen from without, and so leave the building, to all appearances, such as it was before the dome was put on, that is, an unfinished structure. The slabs of this flat roof had to be laid upon the flanges of light ⊥-iron girders, laid across from wall to wall, the flanges being sunk into the stone and flush with the same. Other minor repairs were also to be carried out, the total expenditure being estimated at R3,430.

When these old decorated temples are the least bit ruinous, they are most dangerous piles to meddle with. Built of heavy blocks of stone, put together without mortar, with little or no bonding, the least settlement in any part often converted the whole of the fabric into a loose unstable mass, simply held together by the jamming of the stones in their tendency to collapse. Add to this the frequent breaking of stone beams and their consequent sagging, with the crushing weight of masonry above them, and it would be difficult to find a more dangerous structure in which to risk one's life. In the case of cracked beams, angle iron, in short lengths, can be used in a variety of ways to very great advantage; and, as our principal object with such buildings is simply to preserve them as ruins from further damage, the look of these temporary struts and supports will be hardly more objectionable than a frame placed around a broken museum exhibit to keep it together. At the fine old ruined Vaiṣṇava temple, now being repaired, at Jānjgir, we shall have to use some such expedient to support the broken lintel of the great entrance

Estimates for repairs to buildings at twenty-one places in the Central Provinces, excluding Berār, have been passed by me, aggregating ₨26,063. These are mostly all for minor repairs. Much of this work is still in progress, and, during the year 1905-06, an endeavour will be made to complete these unfinished works.

In Berār, estimates were prepared for works at eleven places, amounting to ₨11,912.

HENRY COUSENS.

CONSERVATION WORK IN MADRAS.

THE claims of the ruined city of Vijayanagar to be mentioned first among the sites, where conservation work has been going on during the past year, need no demonstration. It ranks amongst the most interesting archæological places in India, and is so well known, indeed, that it seems almost superfluous to offer any introductory remarks. For the sake, however, of those readers who are unfamiliar with its history, it may be stated that from the fourteenth to the sixteenth century of the Christian era Vijayanagar was a city of paramount importance in Southern India, and claimed dominion over territories extending from the river Krishnā to Cape Comorin. It is generally believed to have been founded in or about the year 1336 A.D. by a Hindu prince named Harihara, a refugee from Warangal, after the destruction of that city by the Muhammadans about 1323 A.D. The dynasty founded by him "rapidly increased in power and spread its influence over a great portion of the Southern Peninsula. It was perpetually at war with the Muhammadan kings to the north of the Krishnā. The feud continued till Ś. 1486 (A.D. 1564), when a combination of the Muhammadan sovereigns of the Dekhan succeeded, by a supreme effort, in overthrowing the dynasty, destroyed the city, put the king to death, and completely destroyed the Hindu power in the South." [1]

A most interesting description of the state of the city, as it existed at the height of its power, is given in Mr. Sewell's "Forgotten Empire," and, judging from Abdu-r-Razzāq's [2] description of it cited there, it must, indeed, have been an imposing stronghold with its seven lines of walls, massive fortifications, citadels and handsome palaces. Now, unfortunately, the place is sadly ruined, but its remains are still an object of astonishment and admiration to visitors from all parts of the world, and supply ample testimony of its ancient splendour under the Hindu kings. A description of these remains as they now stand, treated from a purely archæological standpoint, is still a desideratum, though much has been done by Mr. R. Sewell's excellent work [3] to illustrate their architecture and their history and to make them generally known.

What strikes one most about Vijayanagar is the strange and weird aspect of the site. Its general appearance, indeed, is widely "different from any expectation one is

[1] Rea, *Vijayanagar* (1886), p. 4.
[2] Persian Ambassador, visited Vijayanagar in 1443 A.D.
[3] "*A Forgotten Empire*" (1900), p. 88.

likely to form on the subject beforehand. Instead of a flat-lying town surrounded by cultivated fields, and intersected by streets regularly laid out, we find the whole site interspersed with groups of bare rocky hills or huge granite boulders, with little vegetation of any sort upon them. The ancient streets or bāzārs—of which three remain in fairly perfect condition, while traces of others are visible—are placed in the valleys among these hills."[1] The ruins cover an area of more than nine square miles, including the several lines of fortifications and outworks. The bāzārs referred to above all have a large temple situated at one end, three of the most important being the Śrī Pampāpatisvāmi, Kṛṣṇasvāmi and Viṭhalasvāmi temples. The bāzār to which the first named temple belongs, was a residential one and the most important of all. It is still in good preservation. The others were occupied as shops, and consist at present of long colonnades of plain stone piers which once constituted the bāzārs. Between them the ground is taken up either by cultivated fields or by dense jungle.

The outer extent of the seven lines of fortifications was about sixteen miles; and traces of them are still to be seen here and there. One spot where they can be followed is eight miles distant, on the Bellary road; and several other vestiges of them have recently been observed by the Survey on the Ānegunde side of the river.

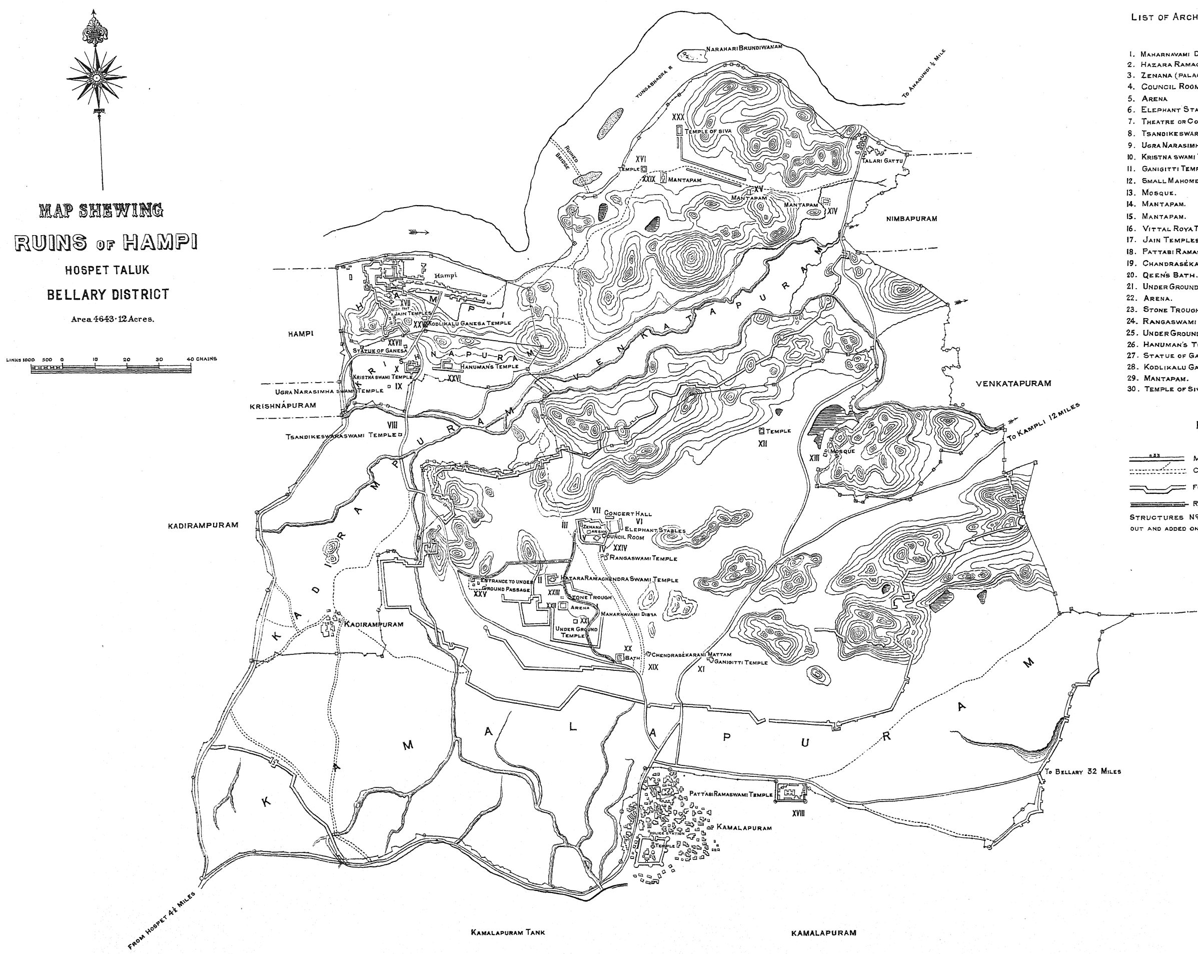
The first effort that was made to rescue these remains at Vijayanagar from further decay was in the early eighties, when Major Cole, Conservator of Ancient Monuments, carried out some repairs to part of the buildings, brief accounts of which may be found in his Reports for 1880-81 and the following years. About this time I myself happened to be staying some months at Vijayanagar, engaged upon a survey of the buildings, and I had an opportunity of seeing the work of conservation then in progress under Mr. Black, the local engineer in charge. It was chiefly concerned in the rebuilding of a courtyard wall of the Viṭhalasvāmi temple, and the replastering of the ancient tower of the stone car at the same place. Some years later, a Collector of Bellary chanced to visit this temple, and seeing cracks in the masonry of the lower part of the car, ordered the demolition of the tower of the car under the mistaken impression that it had been erected by Mr. Black and that its weight had caused the fractures he noticed. As a fact, the cracks were caused at the time that the Muhammadans sacked the city and mutilated its monuments, and during the past twenty years I have been able to discern no change whatever in them. The tower itself was an ancient one and is illustrated in Fergusson's *Indian and Eastern Architecture* and *Architecture in Mysore and Dharwar*, works which were published years before conservation work was ever dreamt of.

After 1883, when the post of Conservator was abolished, the ruins were left untouched, as there was no department to look after them, and, except for the removal of vegetation by the watchmen, they remained in the same neglected and uncared for state until a year ago.

The scheme which has now been undertaken for their preservation is an extensive one, and will require several years for completion. Its objects are to open up the whole of the site by clearing away the jungle and constructing roads to the various buildings, thus making them accessible to visitors, and, further, to carry out systematic

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[1] Rea, *op. cit.*, p. 1.



LIST OF ARCHAEOLOGICAL BUILDINGS SELECTED FOR CONSERVATION

1. Maharnavami Dibba.
2. Hazara Ramachendra Swamy Temple.
3. Zenana (palace enclosure)
4. Council Room (do)
5. Arena (do)
6. Elephant Stables.
7. Theatre or Concert Hall.
8. Tsandikeswaraswami Temple.
9. Ugra Narasimhaswami Temple.
10. Kristna swami Temple.
11. Ganigitti Temple.
12. Small Mahomedan shrine.
13. Mosque.
14. Mantapam.
15. Mantapam.
16. Vittal Roya Temple.
17. Jain Temples (1 to 7)
18. Pattabi Ramaswami Temple.
19. Chandrasékarani Mattam.
20. Qeen's Bath.
21. Under Ground Temple.
22. Arena.
23. Stone Trough.
24. Rangaswami Temple.
25. Under Ground Passage.
26. Hanuman's Temple.
27. Statue of Ganesa.
28. Kodlikalu Ganesa.
29. Mantapam.
30. Temple of Siva.

REFERENCE.

Metalled Road With Mile Stone.
Cart track And Foot Path.
Fortifications.
Road newly opened.

Structures Nos 5. 15. & 21 have been opened out and added on map.

structural repairs to the buildings themselves. Restoration is not contemplated except where it is absolutely essential to the safety of the structures.

The Queen's Bath (No. 20, Plate XXIII) has been connected with the Zanana and the Council Room by a road which also touches upon Maharnavami Dibba and the Hazara Rāmçandrasvāmi temple. Jungle has been cut down generally throughout the site, and particularly from the huge monolithic statue of Narasiṁha and from the Gaṇeśa temple. In some cases, however, the clearance of vegetation has not been, perhaps, quite as effective as could be desired, owing to the roots of plants being so deeply imbedded in the masonry that their complete eradication was impossible without demolishing and rebuilding large portions of the structures.

The foregoing works absorbed most of the season, but time was also found for some of the more urgent works of conservation. The walls of the Gaṇeśa temple, which were leaning outwards at the north-west corner, were buttressed and the roof repaired. The ceiling of the Kṛṣṇasvāmi temple was strengthened with concrete against the percolation of water. The ceiling at the bottom of the *gopura* in the southern entrance of the Viṭhalasvāmi temple, which was threatening to fall down, was propped up with three pillars erected on a heap of *débris*. These pillars had to be sunk to a considerable depth in the ground as otherwise they might have been brought down by the next rains. During my inspection of this temple I found that the *Dīpastambha* (lofty stone lamp pillar), standing in front of it, had been pulled down. A subsequent investigation into the matter showed that some people had made an attempt to blow up the pillar with a cartridge in the hope of finding treasure under its base, and the Executive Engineer, finding it in an unsafe condition, had had it dismantled.

It should be added that watchmen have been appointed to look after all the buildings and to keep them neat and clean.

During the construction of the new road referred to above, some mounds, which evidently marked the remains of destroyed buildings, were dug into, and in one of them were disclosed the foundations of a rectangular building with elaborately carved base. Among the *débris* were lumps of charcoal and calcined iron, probably the remains of the materials used by the Muhammadans in the destruction of the building. The stones bear extensive signs of having been exposed to the action of fire. That the chief buildings were destroyed by fire, historical evidence shows, and many buildings, notably the Viṭhalasvāmi temple, still bear signs, in their cracked and fractured stonework, of the catastrophe which overtook them. No doubt the chief Palace buildings were among those which were thus destroyed, and their remains may be sought for among the many extensive ruined foundations of civil buildings, which exist a short distance from the present so-called Palace buildings. These latter, which are of no great extent, are in fairly complete preservation, and the inference is that it was only because they were of second-rate importance that they were spared by the invading Muhammadans.

Before leaving Vijayanagar I should like to draw particular attention to a map of the city and surrounding country, which is now under compilation. Hitherto the only map of these remains available was the one published in Meadows Taylor and Fergusson's "*Architecture in Dharwar and Mysore*," which gave the names and

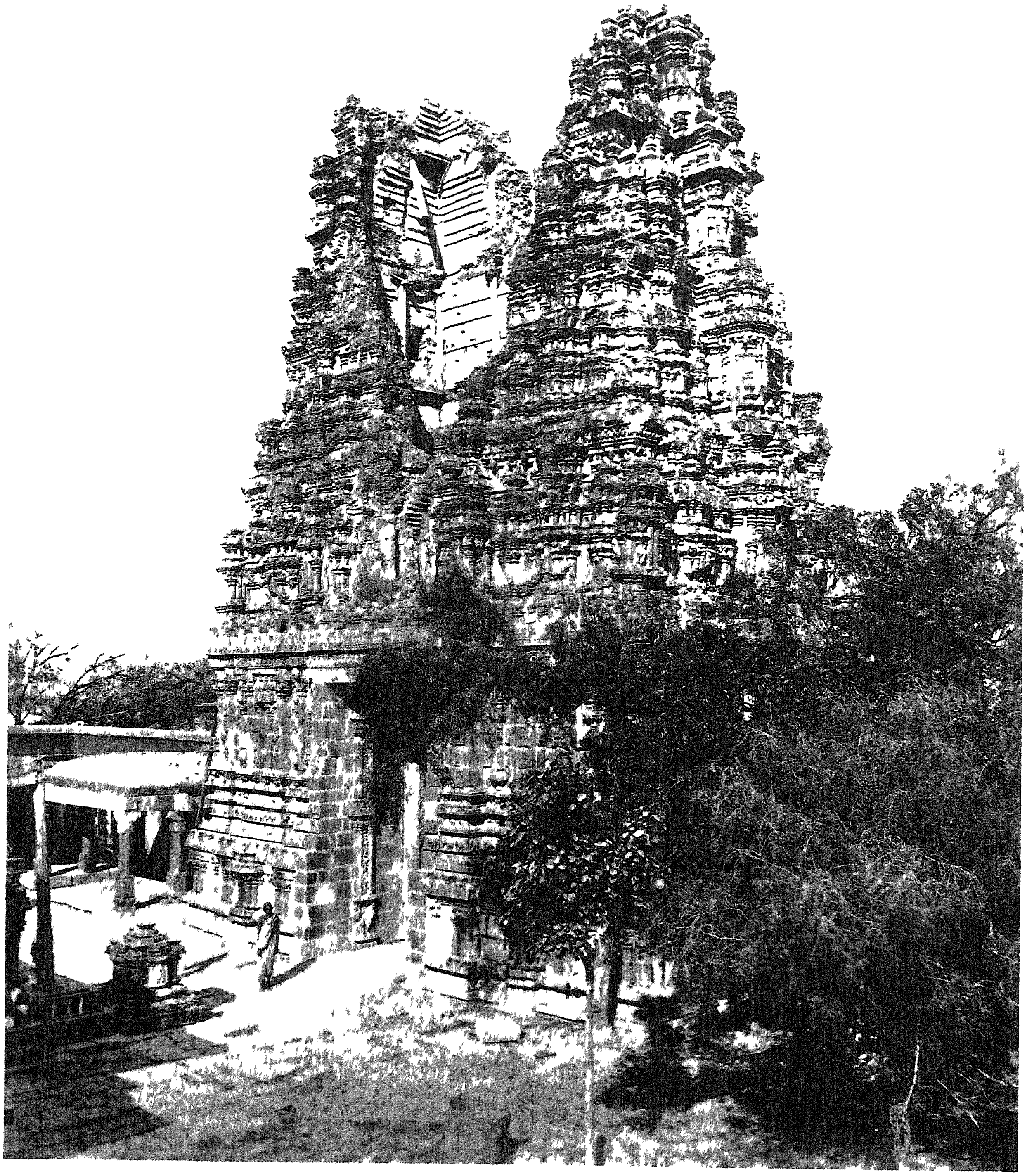
locality of but a few of the many monuments scattered over this extensive area; and the new map will, therefore, be gladly welcomed by archæologists, and will help greatly to facilitate the carrying out of the Survey's scheme of conservation. The map in question has been some time in preparation. Proposals for its compilation were first made prior to 1901, though the work could not actually begin until February 1902. Since then it has been going on uninterruptedly and methodically under an experienced surveyor. All the buildings, whether known before or not, statues, idols, inscribed stones and other miscellaneous objects of interest, were sedulously hunted up, measured and registered, and accounts of the progress made from season to season were published in the annual reports of the Madras Archæological Survey.

Another large group of monuments in this Presidency, which have come under repair, are those of Kāñcīpuram (Conjeeveram). The site has from a very early date been famous, but until the discoveries made by Mr. Sewell and Dr. Burgess in 1883, no one—at least during the last century—suspected that among this group there still existed buildings as early as, or, it may be, even earlier than any other known examples in Southern India

Parenthetically it may be remarked that up to that time the best known monuments of an early date were those at Māmallapuram, and as the *rathas* there are unmistakably monolithic reproductions of earlier structural fabrics, it became a question whether any examples of these previous structures might still exist, but taking into account the great antiquity of the *rathas* it seemed hardly probable that any of their structural prototypes could have withstood the ravages of time and violence for so long. In this connection it must be remembered that until a few years ago few or no Hindu structural temples in the Peninsula were known of a date even anterior to those of the Cōḷas of the eleventh century. This much at any rate seemed likely, that as the Pallavas were the excavators of the Māmallapuram remains, any of the earlier structures, that might still exist, ought to be looked for in the country formerly under the sway of the Pallavas, and possibly in their ancient capital itself. The first, however, to be discovered were the group at Paṭṭadakal,[1] in the Belgaum district, of which the temple of Virūpāksa dates from the early part of the eighth century A.D. The further discovery of the Kāñcīpuram group of temples now under review is, therefore, of considerable importance to archæological research; and with the Paṭṭadakal and Kokānur temples, supplies a further link which earlier investigators had, previous to 1874, looked for in vain.

Though the group has been named after the Pallava dynasty, the only known examples of Pallava architecture remaining in the city of Conjeeveram are six in number. The Tripurāntakeśvara and Airāvateśvara shrines are the smallest of the series. These are constructed of sand-stone, which has suffered severely from the weathering effects of time. Their walls are mostly covered with a profusion of sculptured panels, which are all more or less affected; and some are so effectually worn away, that only parts of the images can be traced. The owners have filled up the hollows with brick and covered the figures with plaster. So complete, indeed, is their

[1] For a description of these temples, see the Report for 1889-90 of the Archæological Survey of Western India.



VIEW FROM INTERIOR OF EASTERN MAIN GOPURAM.

decay, that their successful preservation offers a problem of the gravest difficulty, and it is only by painstaking care that a satisfactory solution can be found to it.

The Kailāsanātha temple, a building of great importance architecturally, was discovered by Dr. Burgess in 1883. It is the largest and most elaborately sculptured one of the group. The summits of the towers of the cells arranged around its courtyards had been previously hemmed in by brick walls. These walls were removed during the past year and the fine effect of the original design can now be clearly seen. Some of the walls, which were cracked and were leaning outwards, were supported up with buttresses, while many of the joints were plastered, and the building freed from vegetation.

The most interesting feature of the Mukteśvara temple is its portico, which bears a striking resemblance to the façades of the cave temples at Māmallapuram. The walls of this temple were thickly overgrown with bushes, which were cut down; but in a few months they had grown again with increased vigour, the cutting seeming to have had the same effect as pruning. The difficulty is that the roots of the plants and trees growing on the top of the walls have penetrated right through the joints and down to the ground itself, so that the only effective course is to dismantle the stone-work, cut out the roots, and then rebuild the masonry in its original position.

There are several buildings at Conjeeveram where conservation work was carried out, but as it was connected chiefly with the removal of vegetation, it is needless to describe it in detail.

The Viṣṇu and Śiva temples at Tadpatri are stated to have been erected by Ramalinga Nayudu in Ś. 1387 or A.D. 1465. Fergusson in describing the former says: "The one now in use, dedicated to Viṣṇu, is the older, and, in so far as whitewash and paint will allow me to judge, ranges with the works of the earliest kings of the Vijayanagar dynasty."[1] It is a building of considerable interest and possesses a small shrine in the form of a stone car, similar to, but smaller than, the better known one in the Viṭhalasvāmi temple at Vijayanagar.

The whole structure was badly in need of repairs. In some of the interior *maṇḍapas*, the roofs leaked, pillars were out of plumb and stone lintels were cracked. The large entrance *gopura* (Plate XXIV) was considered so dangerous that a proposal was at first made to demolish it, but fortunately this idea was afterwards given up. The construction of the *gopura* is characterized by the use of a considerable amount of wood-work, chiefly in the lintels to the window openings which occur in all the storeys. The wood-work had decayed and the supported brick-work had consequently cracked or fallen, leaving the fabrics almost split into two portions. It was decided to replace the lintels, restore the brick-work as far as possible, and do such other repairs in the interior as seemed necessary, but there was no time during the past year to carry out more than the most urgent items in this programme.

The other temple—that of Śiva—to which repairs on similar lines have been carried out, is situated on the banks of the river, a short distance from the Viṣṇu temple. Its beauties chiefly consist in the fine sculptures and carvings on the

[1] *Vide* Fergusson's "*Indian and Eastern Architecture*," p. 375.

gopuras, regarding which Fergusson writes:[1] "The wonders of the place are two *gopuras* belonging to a now deserted temple on the banks of the the river (Pennār) * * * The whole of the perpendicular part is covered with the most elaborate sculptures cut with exquisite sharpness and precision, in a fine close-grained hornblende stone, and produces an effect richer, and on the whole perhaps in better taste, than anything else in this style."

At Trichinopoly the Survey's work has been more in the nature of discovery than conservation, though it involved, it is true, the demolition of several modern structures before the more ancient monuments concealed behind them could be brought to light.

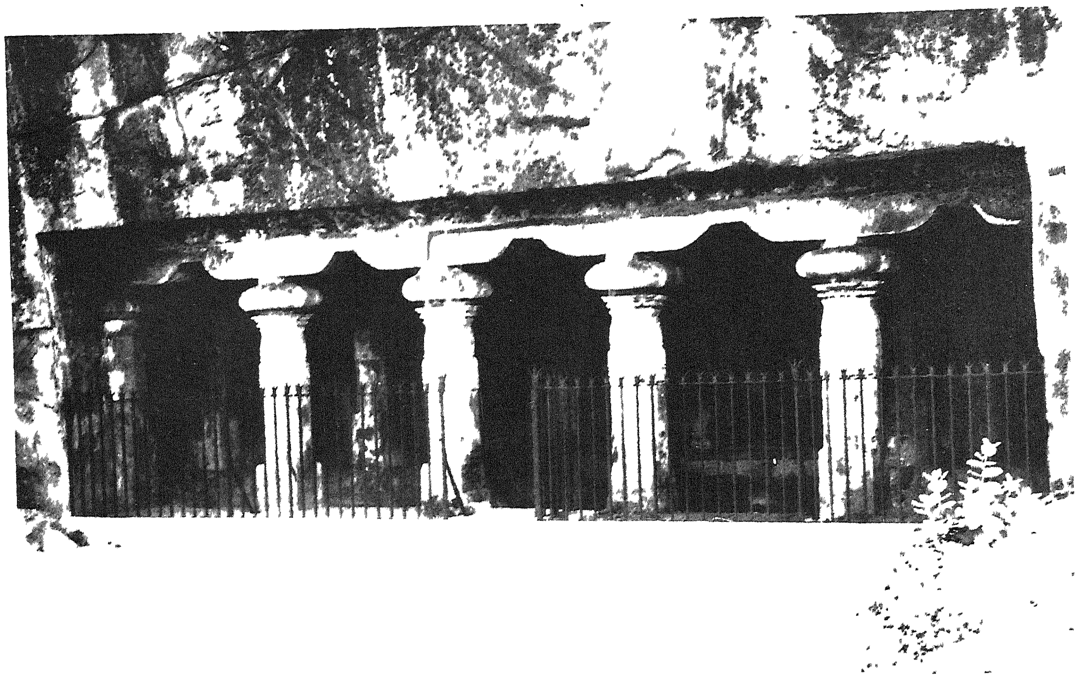
The isolated rock of Trichinopoly, standing out as it does amid a sea of green rice-fields, has ever been a famous object of the district, and there are few visitors who do not find attractions in the group of structural temples clustered upon it, not because they possess any particular merit of antiquity or beauty, but because of their unique situation and the peculiarity of the rock-cut stairway, with its galleries and pillared halls, by which they are approached. These structural temples and the group of buildings connected with them do not, however, exhaust the archæological interest of the rock. Besides them, there are two much older shrines hewn from the rock itself, the one at its base, the other midway to the summit (Plate XXV).

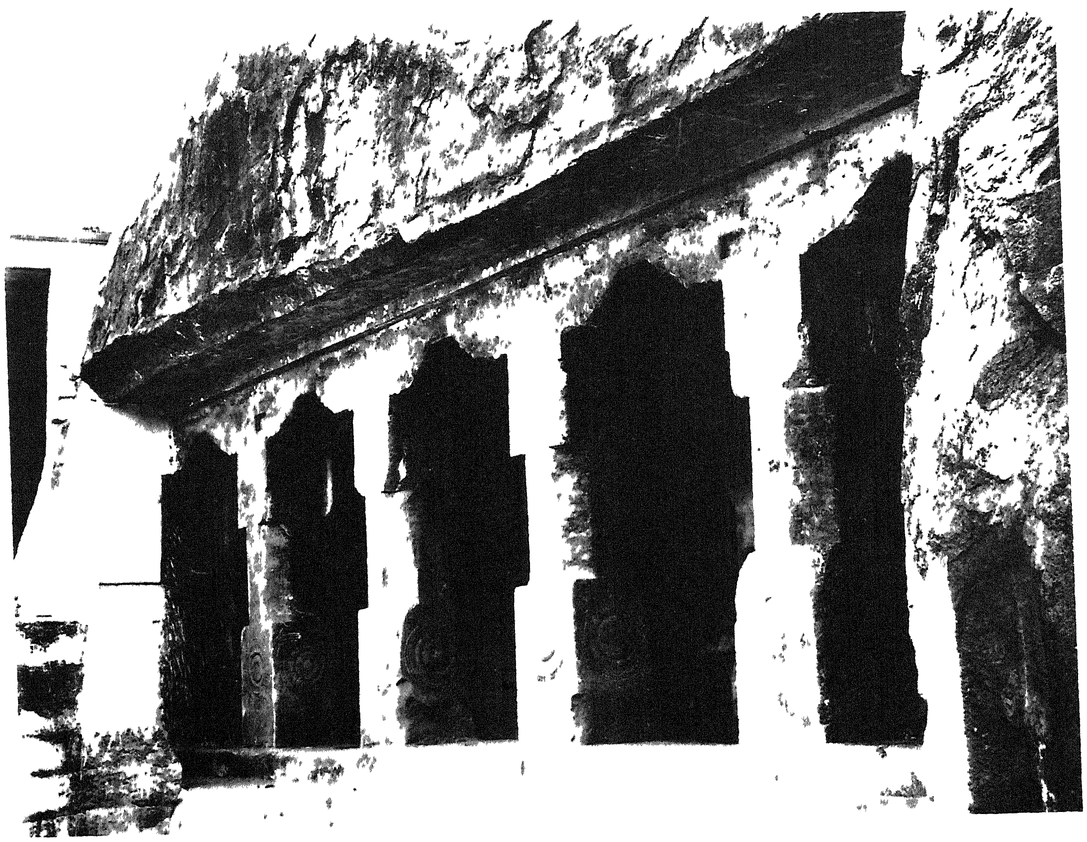
The existence of the upper cave had long been known[2] and some years ago two of the inscriptions in it were copied and published[3] by Dr. Hultzsch, who also noticed the Tamil inscription on the back of the cave. The caves, however, attracted very little attention even among archæologists, and the casual visitor at the Fort never even suspected their existence.

Indeed, the transformation they had undergone during many years of misuse made it difficult to realise their original state or the interest which they offered to the archæologist. The lower cave was hidden completely behind mud walls, and choked up with accumulated earth and *débris*, or with the processional paraphernalia used in temple festivals. The upper one was even worse off. When the rock was occupied by a garrison, it was converted into a powder magazine, and for this purpose a massive stone wall was built to block up its open front; and at a later date, when the powder was removed, it was turned into a store room for the lamps used in the temple above.

The appearance of both is now completely changed. The modern walls have been demolished, *débris* and earth removed, and the ancient sculptures and inscriptions, long hidden beneath them, brought to light. It now appears that the upper cave is a rock-cut chamber of rectangular form with massive stone piers along the front, a small shrine at one end, and a sculptured panel at the other. Judging from its architecture, it would seem to be contemporary with the earliest rock-cuttings at the Seven Pagodas, which belong to the beginning of the 7th century A.D.; and this view is borne out by the character and contents of the inscriptions.[4] That it was the original of all the

[1] *Vide* Fergusson's "*Indian and Eastern Architecture*," p. 375.
[2] *Cf.* Mr. Sewell's *Lists of Antiquities*, Vol. I, p. 268.
[3] *Vide* Dr. Hultzsch's *South Indian Inscriptions*, Vol. I, pp. 28-29.
[4] *Vide* Mr. Venkayya's article on *Inscriptions in the Trichinopoly Cave* in the Epigraphical Section of this Report.





(a) VIEW OF THE LOWER CAVE, AFTER CONSERVATION.

(b) THE UPPER CAVE, AFTER DISMANTLING MODERN ADDITITIONS.

shrines that have since been built up around it, there can be little doubt. The inscription[1] at the back of the cave is in Tamil, while all the others, which have now come to light on the stone piers, are in the Pallava Grantha characters peculiar to those on the rock-cut monoliths at the Seven Pagodas and the structural temples of a similar date at Kāñcīpuraṁ. What makes these caves of particular interest, is that their inscriptions as well as their architectural style establish beyond a doubt that the Pallavas extended their sway as far south as Trichinopoly.

The panel at the end of the cave has, as a central figure, Śiva in the incarnation of Naṭarāja, in which he assumes a dancing posture, treading a *rākṣasa* under foot. He is armed with the usual weapons, and in one hand he holds a *nāga*, while ornaments adorn his head, neck, arms and legs. Above his uplifted right hand, is his consort Gaṅgā; on his left, a rat seated on a pedestal; and in the upper corners of the panel, are Gandharvas, while below, are worshipping Ṛsis.

The lower cave lies a short distance to the left of the entrance to the rock-cut stairway, to which I have already referred, and which, it may be surmised, was originally cut to give access to the upper shrine. In size it is somewhat larger than the upper cave, and, though it possesses no inscriptions, appears to be of somewhat later date. Its carvings are more ornate in style, and its sculptured columns more slender than those in the upper cave. Probably it was built a few centuries later than the other—a probability which is strengthened by a comparison of its architectural detail with similar detail in some of the rock-hewn temples at the Seven Pagodas. At each end of the cave is a shrine, and on the back wall are sculptured figures of Śaivite deities in five panels, descriptions of which are appended below. It might be mentioned that during the excavations of the ground in front of this cave, when a railing was being erected for its protection, several stone cannon balls were unearthed.

Panel No. 1.—An image of Gaṇeśa armed with the usual weapons. The only ornaments he wears are a necklace, *bájúbands* on the arms and bangles on the wrists. The upper part of the panel is occupied by Gandharvas, and the lower by Gaṇas.

Panel No. 2.—A four-armed standing image of Śiva, with Gandharvas above, and two Gaṇas below

Panel No. 3.—Three-faced Brahmā in a standing posture, with a string of beads in one hand, and a lotus-flower in another. As in other panels, there are two Gandharvas in the upper corners, and two seated Ṛṣis in the lower.

Panel No. 4.—Candra, or the moon, in a standing posture. He holds a string of beads and a lotus-flower in his hands, like the figure of Brahmā. The accompanying figures in the panel are similar to those in the others. The image of Candra is recognized by the form of the moon carved behind his head.

Panel No. 5.—An image of Īśvarī. This panel has been left incomplete by the sculptors. One of the hands of the goddess and one of the Gandharvas in the upper corners are in rough block outline. It is so also with the images of the Ṛṣis or devotees in the lower corners.

In addition to the more important undertakings, which I have been describing at Vijayanagar and other places, one or two minor items of conservation remain to be mentioned. Such is the work in the beautiful temple of Jalakaṇṭheśvarasvāmi in the fort of Vellore in North Arcot. Though not one of the largest, it is one of the best

[1] This was copied by Dr. Hultzsch in 1887. For his remarks on it see his *Progress Report* (G. O. No. 424, Public, dated 20th April 1888, paragraph 12).

known of South Indian temples, chiefly owing to the prominence given to it by Fergusson in his *History of Indian and Eastern Architecture.*[1] Excellent as the whole building is, its chief interest lies in its elaborately sculptured *Kalyāna mandapa.*

The temple generally is in good preservation, but all over it there were many parts beginning to show signs of decay, which, if not arrested, would ultimately have led to widespread ruin. Much of it was due to the exudation of moisture, caused by the floods of water pouring in from the moat round the fort, and by the saline deposits which accompanied it. It was deemed advisable, therefore, to reface the brick-work wherever it was badly corroded. This work is still proceeding, and will take some time to finish, as it requires considerable care in the execution This it has undoubtedly received from the Public Works officers up to the present, for it is difficult to distinguish the new from the old work, the former having been brought into almost perfect harmony with the latter.

Other repairs on a more extended scale are to be undertaken at the temple, involving the rebuilding of the western *mandapa*, which has subsided. A sunken chamber beneath this *mandapa* has also to be explored But as this work has not yet begun, a description of it may be reserved for a future Report.

Another structure that has undergone repair on a small scale, is a square tank in a temple at Vālikoṇḍāpuram, which was once the seat of a Navāb, and still possesses many remains of ancient buildings, such as forts, temples, masjids and tombs. In an article by Mr. M. J. Walhouse, late M. C. S., in the *Indian Antiquary*,[2] this tank is said to have a Jain or Buddhist appearance, "being surrounded with a curious low sunken cloister the roof of which is level with the ground" The whole monument is in a very dilapidated condition, the steps leading to the water have sunk, the pillars are out of plumb and the roof of the surrounding cloister leaks. No attempt can of course be made to repair all the damage which this structure has suffered, but a considerable advance has already been made in the matter of urgent protective works, and another year will see its general preservation adequately secured.

Finally there remains to be mentioned the huge rock inscription containing eleven out of the fourteen edicts of King Aśoka It stands at a village about eighteen miles north-east of Ganjam, and is noted in Mr. Sewell's *Lists of Antiquities.*[3] Though many rocks and pillars inscribed with the edicts of this king exist in other parts of India, this is the only one known in Madras[4] The site where the rock stands was once, no doubt, occupied by a large city, but time and continuous cultivation have succeeded in effacing all but the barest traces of the ancient structures.

For many years it had been observed that the surface of the rock was flaking off, and on the assumption that this was due to the action of the weather, various means of preservation, such as the application of a silicate[5] solution to the surface, were tried, but without success. The effects of time, though sufficiently manifest in the weather-worn appearance of the rock, are evidently not the only causes of its deterioration;

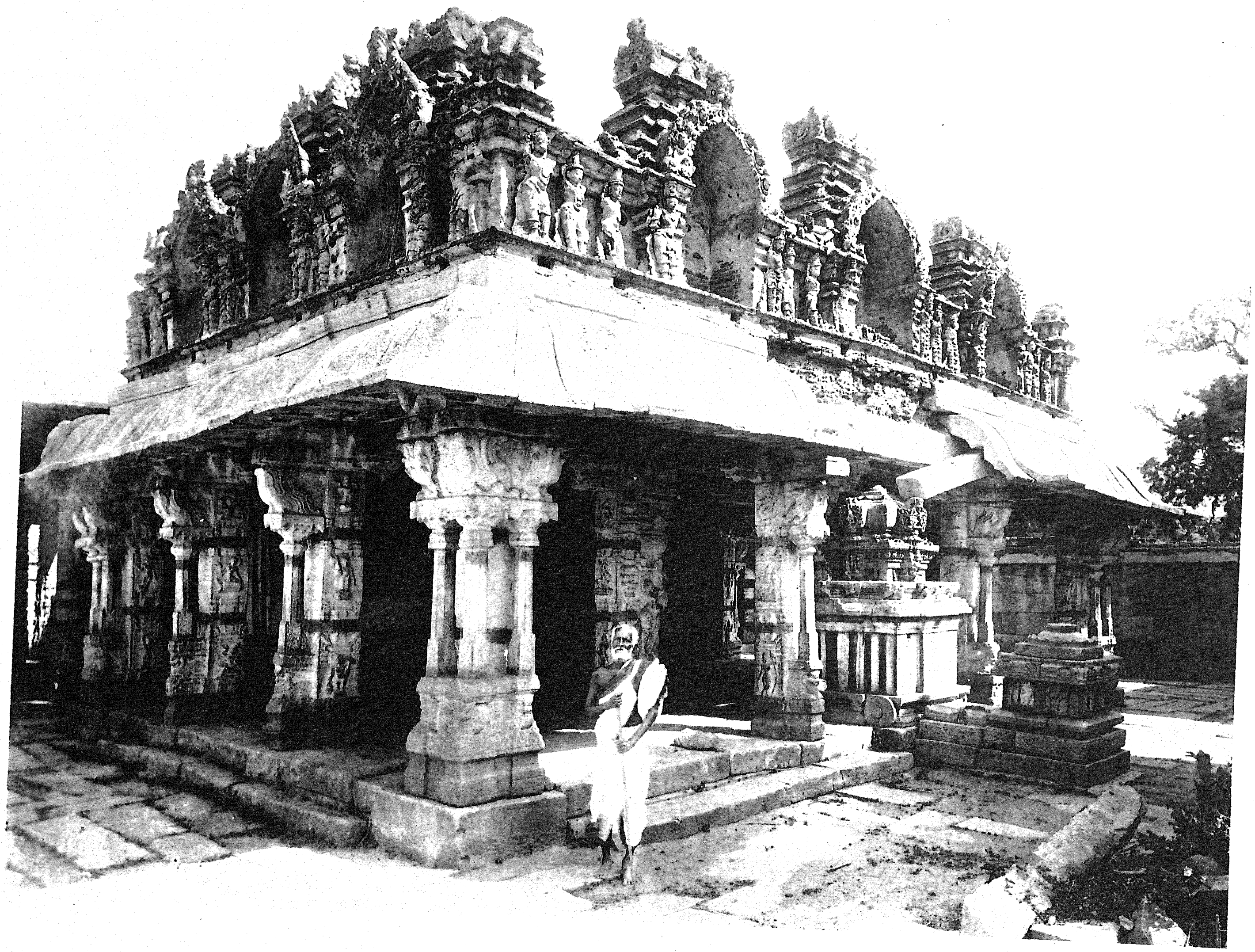
[1] Pp 370-373. [2] Vol. IV, p. 272. [3] Vol I p 4

[4] Another was found some years ago by Mr. Rice within the borders of Mysore. The Buddhists do not seem to have penetrated far south in the Peninsula, for though I have discovered and excavated many of their sites in the Kistna and Godavari districts, with a few in Nellore, I know of no others further south

[5] This has been found effective on sand-stone, but seems to be useless on the granitic rock on which the edicts are cut.

PLATE XXVI.

SOṀPALLE: THE CHENNAKEŚAVASVĀMI TEMPLE.



VIEW OF THE MAṆḌAPA, BEFORE REPAIR.

for, on a recent visit, I learned that a civilian many years ago attempted to remove by fire—in the way ordinarily followed in quarrying in this country—the inscribed surface, flake by flake, in order, probably, that it might be carried off and deposited in some museum. The attempt, however, was only partially successful, and resulted in the gradual flaking or scaling off of the surface, which has gone on ever since. All the expedients for preserving this ancient and valuable record having failed,

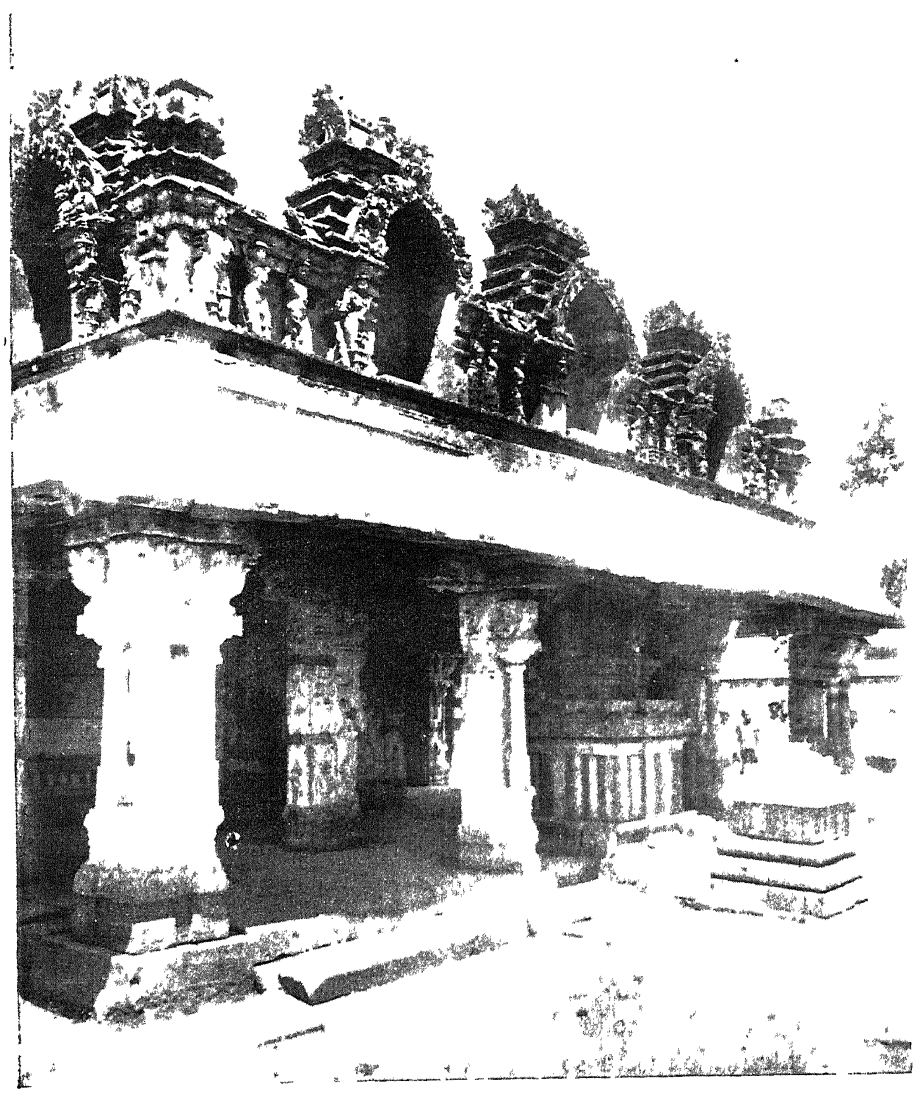


Fig. 1: Maṇḍapa of the Chennakeśavasvāmi temple, Sompalle, after repair.

a shed has now been erected to shelter the inscribed surface of the rock, and this, it is hoped, will prove an effectual means of protecting it alike from the sun and rain.

The two illustrations with which this article is concluded relate to the beautiful temple at Sompalle, the repairs to which were described in last year's Report but the photographs of which were not then ready. Plate XXVI shows the front of the temple with its massive cornice partly ruined, Fig. 1 shows it restored.

A. REA.

SOME CONSERVATION WORKS IN BURMA.

Mandalay.

THE Queen's Golden Monastery, reproduced in Plate XXVII, is a very fine specimen of Burmese architecture, and was built by Supayalat, Queen of King Thibaw, in 1885, that is to say, just before the British annexation of Upper Burma. When completed, it was heavily gilt; but most of the gilding on the outside, which is exposed to the weather, has come off, and its appearance is now somewhat tawdry. The gilding inside is, however, still well preserved; and the whole structure constitutes one of the most attractive sights of Mandalay. In December 1901, its repair was ordered by His Excellency, Lord Curzon. It was directed that regilding, at the public expense, should not be attempted, but that, since the building was next to the Palace—the most picturesque monument in Mandalay—structural repair and the renovation of broken or rotting wood-work should be undertaken on a modest scale. The *pyatthat* or spire had been moved out of position by the storm of April 1901, and the slant has now been rectified; the balcony floors have been strengthened by the insertion of new transverse supports and by renewing parts of the flooring; the roof and the spire have been made water-tight; and the carved panels on the balcony, which were broken or rotten, have been renovated. The work of repair and renovation was completed in March 1904, the cost amounting to R3,076.

The *pyatthats* on the walls of Fort Dufferin are a distinctive feature of the walls of a Burmese capital. Their use for the storage of arms and military stores has long been lost sight of, and they now serve merely an ornamental purpose. Their continued existence, after the introduction of gunpowder, was due to a desire to follow historical precedents, which were so dear to the conservative instincts of Burmese kings in architectural and sumptuary matters. The prescribed number of *pyatthats* is 48, which is made up as follows:—

At the corners	4
Over the gateways	12
Intermediate between the above	32

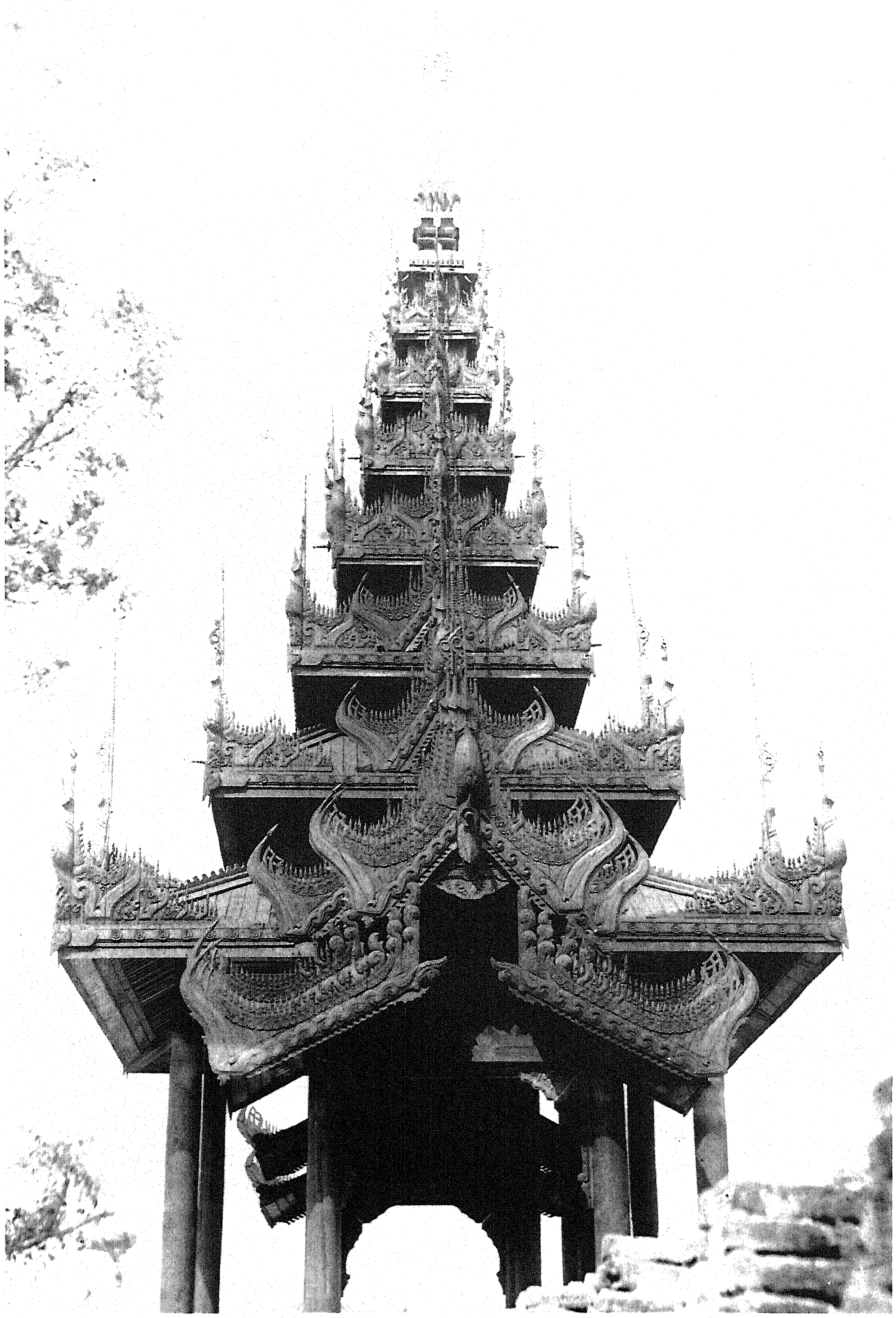
Seven of the *pyatthats* had been destroyed by fire or natural decay, namely, one at the south-eastern corner, one over the Lethein Gateway on the northern face of the Fort (Plate XXVIII), one over the Tinsha Gateway on the western face, and four intermediate *pyatthats* on the northern face. The construction of seven new *pyatthats*,

MANDALAY.

PLATE XXVII.



THE QUEEN'S GOLDEN MONASTERY



PYATTHAT OVER THE MAIN GATE OF THE NORTH CITY WALL, RESTORED.

in the place of the missing ones, was sanctioned at an estimated cost of R43,968, of which R35,988 was spent in the course of the year 1903-04. An estimate of R23,000 was also sanctioned for executing special repairs to the remaining 41 *pyatthats,* of which R4,981 was expended. In addition to the above amount an expenditure of R1,481 was incurred on the annual petty repairs to them.

Burmese architecture in wood is noted for the brilliancy of its effect rather than for the exquisiteness of its finish. The object aimed at is splendour combined with variety and proportion, and not mathematical precision in detail. Its value is more ethnographic than æsthetic, and the following remarks of Fergusson on Nepalese architecture (*History of Indian and Eastern Architecture,* pages 299-300) apply to it with equal force: "The style may be called barbarous, and the buildings have the defect of being principally in wood; but their height, their variety of outline, their wealth of carving and richness of colour, are such as are not to be found in Benares or any other city of the plains. The real point of interest in the architecture * * to the true student of the art lies in its ethnographic meaning. When fully mastered, it presents us with a complete microcosm of India as it was in the 7th century when Hiouen Thsang visited it—when the Buddhist and Brahmanical religions flourished side by side; and when the distinctive features of the various races were far more marked than they have since become under the powerful solvent of the Muhammadan domination."

Pagan.

During the year, an expenditure of R20,000 was incurred on repairs to several ancient pagodas at Pagan, *viz.*, the Ananda, Thatbyinnyu, Manuha, Gawdawpalin, and Shwekugyi. The work done was of the nature of conservation, and consisted of uprooting jungle, making roofs water-tight, repairing cracked arches, and petty repairs to floors.

The Ananda Pagoda (Plate XXIX) was built by King Kyanzittha in 1090 A.D. Its interior aisles are adorned with stone sculptures of exquisite workmanship, representing various scenes in the life of Buddha, while around the exterior walls of its four terraces are disposed in bands ornamental tile-work plaques, numbering some 1,500 in all, each of which illustrates a Buddhist ceremonial, or represents one of the *Jātaka* stories. It is intended to have photographs, or, if in some cases that is impracticable, drawings prepared of these plaques and to have the legend beneath carefully copied and translated, so that the *Jātaka* stories, which they illustrate, may, if possible, be identified. Such a contribution to Buddhist iconography would, it is believed, be gladly welcomed and appreciated by Oriental scholars in Europe.

"*Thatbyinnyu*" or "*Sabbaññu*" signifies "Omniscience," which is one of the attributes of Buddha. The pagoda of that name [Plate XXX(*a*)] was built by King Alaungsithu in 1144 A.D., after the model of Indian temples. It has five storeys: the first and second were used as the residence of monks; images were kept on the third; the fourth was used as a library; and on the fifth was constructed a pagoda containing holy relics. The building is thus a combination of a *stūpa* and *vihāra,* and its architecture recalls that of the *Raths* of Mahāvellipore in the Madras Presidency.[1]

[1] *Vide* pages 134, 326, 334 of Fergusson's *History of Indian and Eastern Architecture.*

One peculiarity is to be noticed in these two temples: they are both surmounted by *śikharas*.[1] So far as Burma is concerned, whether this form of ornamentation is derived from the tower at Budh Gaya or from the temples of Orissa, or whether it is due to Jaina or Hindu influences, may be considered to be a moot question.

The third shrine selected for illustration is the Manuha temple [Plate XXX (*b*)] situated at Myinpagan, which is about two miles to the south of Pagan. It was built in 1059 A D., by Manuha, the last king of the Talaings, who was brought captive to Pagan in the train of Anawrata, the hero-king of Burma, who transplanted the Southern School of Buddhism to the Upper Valley of the Irrawaddy. The architecture of the building is plain, and its design chaste, as becomes a temple erected by a captive king. In the porches are three images of Buddha in a sitting posture, while the main building contains a recumbent image of gigantic proportions representing Buddha in the act of entering *Nirvāna*.

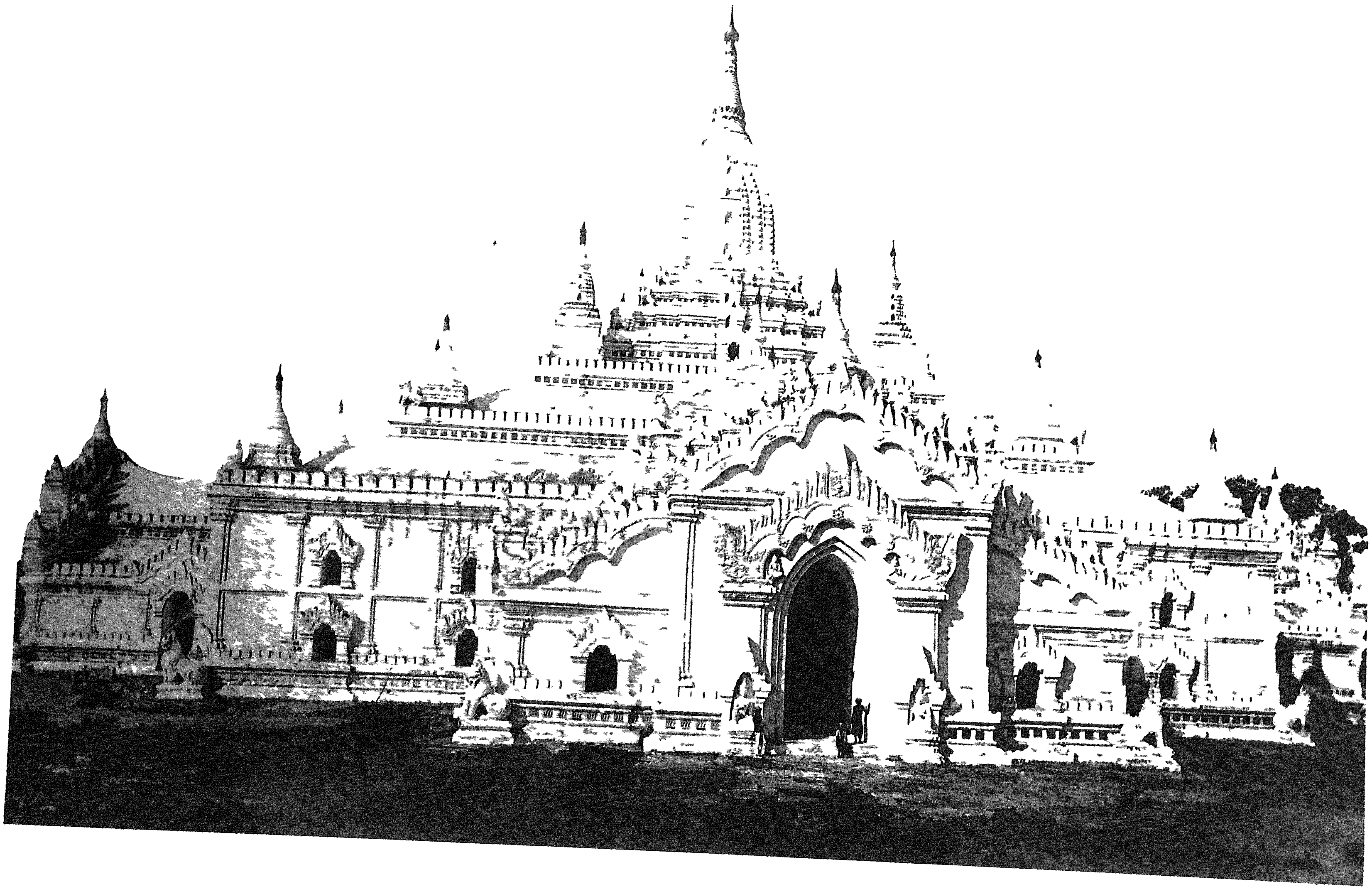
The images and the stone sculptures in the Ananda and Manuha temples have a cast of features and contour of body strikingly resembling the Dravidian type, and the fact may, perhaps, be ascribed to the employment of Tamil masons and workers in stone.

TAW SEIN KO.

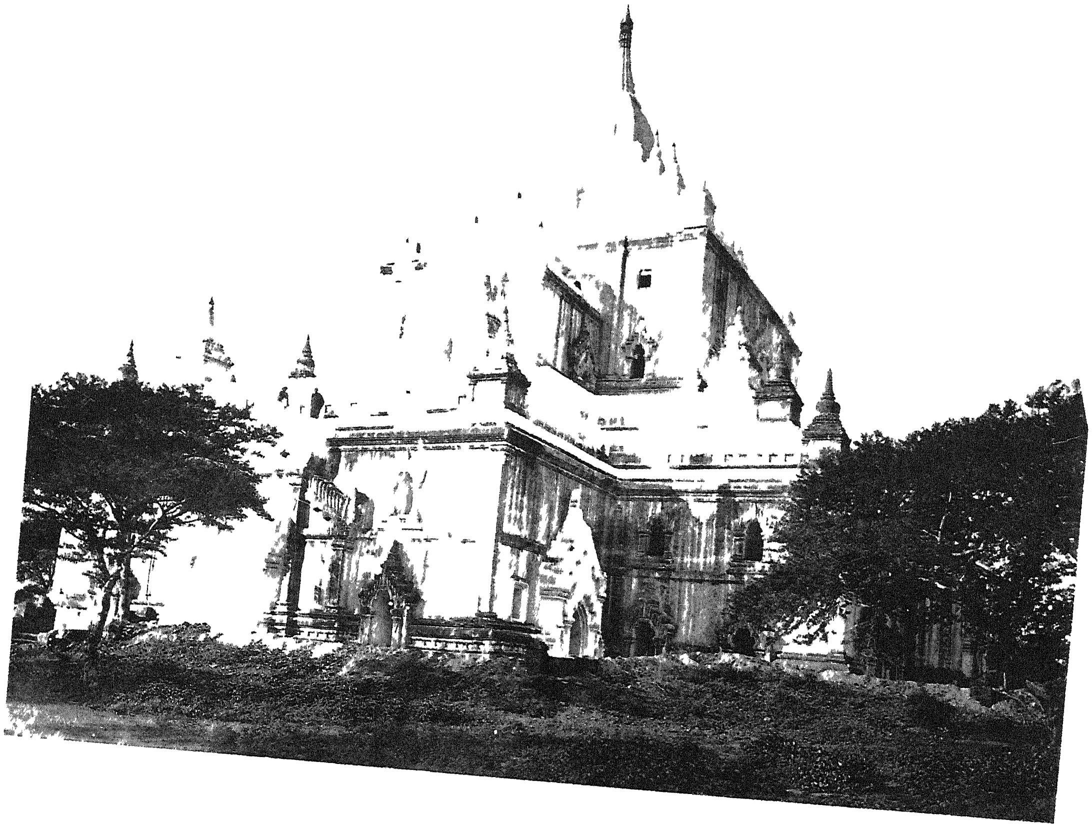
[1] *Vide* pages 221-225, *ibid.*

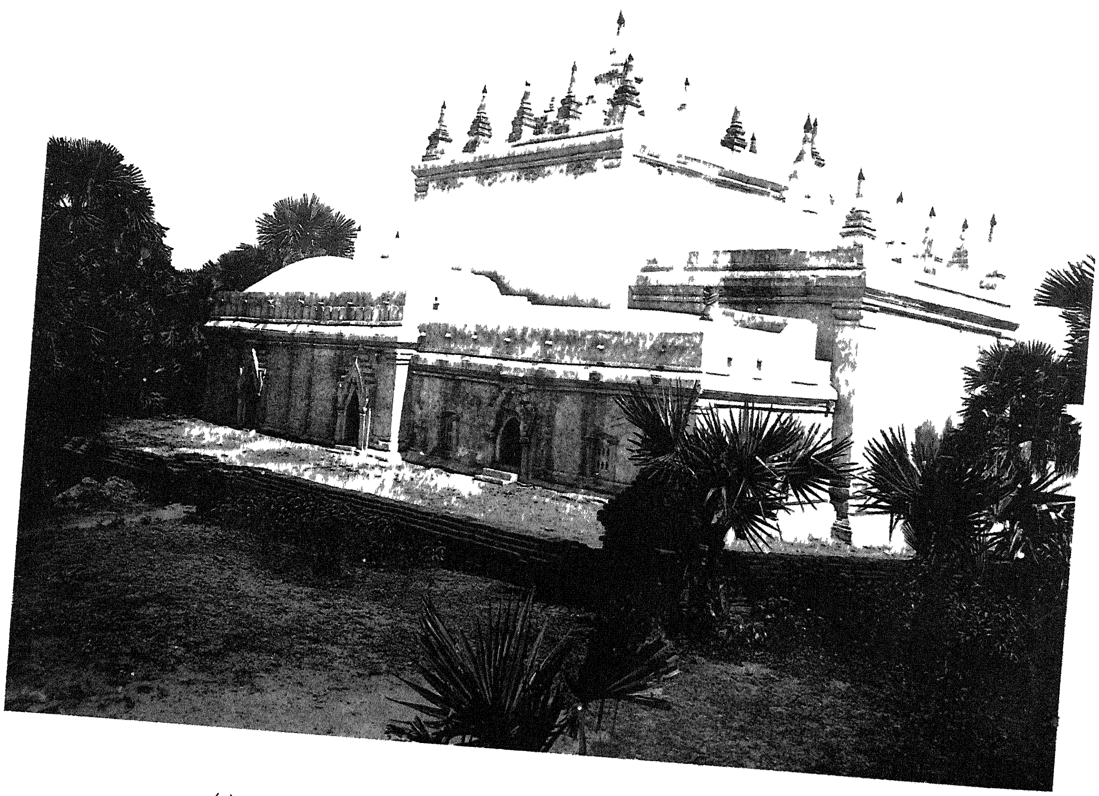
PLATE XXIX.

PAGAN



ANANDA PAGODA.





(a) THATBYINNYU PAGODA (b) MANUHA TEMPLE

EXPLORATION AND RESEARCH.

THOUGH productive, so far as it has gone, of eminently satisfactory results, the exploration of buried remains has not on the whole made as much progress as was anticipated. It had been intended that the preliminary excavations carried out in 1902-3 at Chārsada, which gave such good earnest of future discovery, should be continued in the following year under Dr. Vogel's superintendence, but owing to a new Surveyor having been appointed in the Frontier Province, objections to Dr. Vogel's deputation were raised by the Local Governments, and the work has therefore had to be suspended, without, it would seem, any prospect of its being resumed in the near future. This is the more to be regretted as the special grant sanctioned for the work having lapsed, it may be difficult to obtain the necessary funds when they are required; and, even if the money is forthcoming, a new excavator will in any case lack the useful experience of the site gained by Dr. Vogel during the first season's operations.

In Bengal, Dr. Bloch has broken fresh ground on the ancient site at Basārh, and his short trial excavations there have brought to light remains of buildings and antiquities which, apart from their own intrinsic worth, indicate the site as a most promising one for future exploration. As regards the identity of Basārh with the ancient Vaiśālī, the whole question was ably discussed a short time ago by Mr. Vincent Smith in a paper contributed to the Royal Asiatic Society's Journal, and the cogent arguments which he there advanced in regard to its geographical position in relation to other known sites as well as the topography of the place itself as described by the Chinese Pilgrims, leave little room for doubt that the identification put forward by General Cunningham and currently accepted since his time, was the correct one. It was hoped, of course, that practical excavation would yield some decisive evidence on the point; but this hope, unfortunately, has not yet been fulfilled, nor indeed is it to be wondered at, when we bear in mind the limited extent of the past year's operations. On the other hand, Dr. Bloch's discoveries in the mound of Rājā Bisāl kā Garh indisputably attest the existence here of an important centre of civil life during the 4th and 5th centuries A.D., as well as the occupation of the site at a much earlier period, while the outcome of the accurate survey which he has made of its environs over an area of some 12 square miles, is to confirm Mr. Vincent Smith's main conclusions, although it does not bear him out in certain particulars.

Actual digging was confined by Dr. Bloch to the one mound of Rājā Bisāl kā Garh, which was assumed from its position, name and general conformation to mark the site

of the palace of the Vaiśālī kings, and even within this limited area time was found only for sinking some eight trial pits and trenches. These revealed three distinct strata of brick structures : the uppermost belonging to the Muhammadan period, the second to the epoch of the Imperial Guptas, and the third to some more remote date.

The Muhammadan remains are few and appear to be comparatively modern, while the lowest stratum is represented only by a few scattered fragments, too scanty to afford any conclusive evidence as to their precise date or character. It is in the remains of the Gupta era, therefore, that our interest mainly centres. These consist for the most part of small chambers standing little higher than their foundation, with floors of concrete and brick, while among the *dêbris* were found large numbers of the tiles with which their roofs were covered, together with terra cotta pinnacles and roughly carved bricks. The buildings are evidently of a secular nature throughout, and no remains of any temple have yet been brought to light; in fact, a miniature stone image of Gaṇeśa of later date was the only religious relic which turned up. This fact makes it all the more important for us to open up the whole group of buildings here, since no other structures of a similar character and of so early a date have yet been brought to light in India. That any structural remains will be found in a good state of preservation is unlikely, seeing that the superstructures were almost undoubtedly of wood, and that there are evidences everywhere of a general conflagration having enveloped them. This catastrophe, much as it is to be deplored, is not, however, without its advantage, since it has been the means of preserving numerous minor antiquities, which would otherwise almost certainly have been lost to us.

Dr. Bloch's operations and the finds which he has already made are fully described in the special article which he has contributed on the subject. There is one find, however, of such exceptional interest that I cannot omit mention of it here. In one of the small chambers in the second stratum mixed with broken potsherds, ashes, burnt rice and other rubbish, was found a hoard of some seven hundred clay seals, evidently used as attachments to letters or other literary documents. They belonged partly to officials, partly to private persons, generally merchants or bankers, but one specimen, bearing the figure of a *liṅga* with a *triśūla* on either side and the legend "*Āmrātakeś-vara*" evidently belonged to a temple, perhaps, as Dr. Bloch suggests, the famous temple of that name at Benares. The importance of such a find will be at once recognised. Clay seals have been found at almost every ancient site in India, but there is no instance of so large a collection having been found in one place, and while, moreover, the great majority of such seals consist of tablets dedicated to some shrine, the present specimens are entirely of an unreligious type, and furnish us with a new and important series of monumental records of the 4th and 5th centuries A.D.

Another exceptionally interesting contribution, which Dr. Bloch makes to the present volume, concerns two caves and their inscriptions in the Rāmgarh Hill in Sargūjā State. The larger of these caves, known as the Sītābengā, seems to be a natural cavern with an artificial chamber hollowed out at its back, while at the entrance, under the arch of rock, are several tiers of seats or steps, semi-circular in plan and facing outwards. These seats seem to form, as it were, the auditorium of a small theatre, the orchestra being on the sloping plateau in front of the cave; and this feature, coupled

with the presence of an inscription on the north side of the entrance, which Dr. Bloch interprets as relating to the praise of poetry and festive merry-making, leads him to conclude that the cave was intended for poetic recitations and theatrical performances. This conclusion, he thinks, fits in also with the meaning of a second inscription cut in the smaller, or Jogīmārā, cave close by, which, according to a new interpretation which he ventures for its fourth line, signifies that the cave in question was provided as a resting-place for girls, *i.e.*, for the actresses employed in the adjoining theatre. But more important still is Dr. Bloch's suggestion that the plan of this little theatre, rough as it is, is derived from a Greek prototype, and that consequently it has a direct bearing on the question of Hellenic influence on the Indian drama. A preliminary notice on the discovery of the theatre, published in the *Zeitschrift der Deut. Morgenländ. Gesellschaft* (Vol. LVIII, p. 455), has already aroused considerable interest, and in a later part of the same volume Prof. Lüders draws attention to several passages in poetry and epigraphical literature where the use of caves by courtesans and, it would appear also, for theatrical performances is spoken of. Prof. Lüders' note gives material support to the view that the Sītābengā cave was employed for the latter purpose, and that the so-called steps in front were, in fact, benches for the spectators at these entertainments. On the other hand, both Dr. Burgess and Mr. Cousens, whose authority on the caves of India cannot but carry considerable weight, express themselves generally sceptical on the subject, though the specific counter-arguments, which they have so far advanced, are not convincing.[1] On the whole, the evidence at present seems in favour of this cave having been used for musical entertainments of some sort or other, but whether a stage was erected, or whether the performances were given at all on the lines pursued in a Greek theatre, or whether the auditorium was copied from some classical model, are problems which will still remain open to question.

The exploration of the site generally known as Brāhmanābād in Sind does not belong properly to the past season's work. The preliminary operations, which Mr. Cousens describes, were carried out in 1896-97, and an account of them is to be found in the Progress Report of the Bombay Circle for that year; but that account was accompanied by no photographs either of the site or of the antiquities discovered, and such photographs being indispensable to a proper understanding of the discoveries made, it was decided to republish Mr. Cousens' description in its present form. There was the more reason for doing this just now, as it has been settled to continue the work of exploration next year in order to determine which portions of the site may be given up to the peasant cultivators round about, and to arrange if possible for the earth to be removed by them without unnecessary damage to the remains concealed beneath.

The general character of the site is like that of many another in Northern and Western India: nothing but endless mounds of brick *débris*, mingled with broken pottery and traces here and there of charred wood, without a distinguishing feature except one solitary shapeless ruin and the remnants of the old encircling walls and bastions of the town. The very vastness of such a site and the absence of all guiding land-marks make it the despair of an excavator. For the most that he can do is to sink some speculative trenches here and there, and possibly lay bare the ruins of one or two

[1] See an article by Dr. Burgess about to be published in the *Indian Antiquary*, with a proof copy of which he has very kindly supplied me.

buildings, if he be fortunate enough to light upon them. To attempt a systematic clearance of even a fraction of the ruins would entail years of labour and a wholly prohibitive expenditure, without the hope of any appreciable return.

The main and most interesting result of Mr. Cousens' digging has been to settle a long-standing controversy regarding the identification of this site. The ruins were first discovered and superficially explored fifty years ago by Mr. A. F. Bellasis, who identified them on good grounds as the long-sought-for Brāhmanābād. This view was generally accepted—though it could not be definitely proved—until General Haig some thirty years later brought forward new arguments to prove that they marked the site of Mansūrah—the first Arab capital of Sind, which sprang into existence after the fall of Brāhmanābād—and at the same time stated his conviction that Brāhmanābād itself was to be sought in the ruins at Depar Ghāngro, some 6 miles distant. Mr. Cousens' investigations have now established the existence of two well-defined strata in these remains, the lower and earlier of which belongs to a Hindu city, the upper to a Muhammadan; and there can be little doubt that this discovery reconciles the seemingly contradictory theories of Mr. Bellasis and General Haig, the truth being that first Brāhmanābād and after it Manṣūrah existed on the same site. Some difficulty is, no doubt, at first sight presented by the statements of the historian Bilādhūrī that "Muḥammad ibn Qāsim went to old Brāhmanābād, two farsangs from Manṣūrah, which town, indeed, did not then exist, its site being a forest,"[1] and again a little further on that, at the time of writing, *i.e.*, *circa* 850 A.D. or later, "Brāhmanābād was in ruins." But, even supposing that Bilādhūrī's authority is reliable (and it must be remembered that he never actually visited Sind), these statements will be found on closer inspection to be quite compatible with the location of the two cities on one and the same spot. The fact is that, like many other Indian towns, Brāhmanābād and its suburbs extended in straggling formation over several miles, and though the surrounding villages may originally have been distinguished by different names, all their ruins, including those as far afield as Depar Ghāngro,[2] would afterwards come to be known under the one title of Brāhmanābād. Manṣūrah would occupy but a portion of this extensive site—no doubt that of the city of Brāhmanābād proper,—but this fact would afterwards be lost sight of and later generations would speak of the outlying remains as those of Brāhmanābād. Such phenomena are so common in India that to cite parallel instances would be superfluous. This explanation is borne out by the opinion of Sir H. Elliot, who concluded on the authority of Muhammadan historians that "a large portion of Brahmanábád was included in Mansúra, and that in point of fact the two sites are identical."[3] It is borne out, too, by the fact that the two names of Brāhmanābād and Manṣūrah were often used one for the other,[4] and by the sudden and complete disappearance of Brāhmanābād from history after the rise of Manṣūrah. With the evidence of these facts before us, supported as it is by the still more trustworthy discoveries of Mr. Cousens, we cannot be far

[1] *Cf.* Elliot, *History of India*, I, p. 122.

[2] Captain McMurdo states (on what authority is not known) that Bahmanah was afterwards called Depa Kangara, *i.e.* Depar Ghāngro. But it is quite certain that Depar Ghāngro is not the site of the city of Brāhmanābād. The remains there are altogether too scanty.

[3] *History of India*, I. p. 371.

[4] *Cf.* M. Reinaud, *Mémoire sur l'Inde*, pp. 193, 298. Elliot, *op. cit.*, I, p. 372. There is an instructive passage in the Mujmalu-t-tawarīkh to the effect that "Bahman founded a city which he called Bahmanábád. According to one account this is Mansúra; but God knows." *Cf.* Elliot, *op. cit.*, I., p. 106.

wrong in regarding the lower stratum of remains as those of Brāhmanābād. It would indeed be strange if they proved to belong to any other ancient city.

In Madras the exploration among the prehistoric remains in the Tinnevelly district has now been going on for some years, and, if the finds continue to present the same features as at present, the work will be brought to conclusion next season. It had been anticipated that the excavation of some of the town sites there might throw light on the date of the graves in the neighbouring cemeteries and the ethnic origin of the people who constructed them ; but up to the present these sites, although their location has been definitely ascertained, have failed to yield material of any real consequence, and, what is equally disappointing, the further discoveries made by Mr. Rea in the cemeteries themselves, notwithstanding their fascinating interest in other respects, contribute nothing new which might help to bring these problems nearer solution.

In addition to following up his previous excavations at Ādittanallūr, Mr. Rea has broken fresh ground this year in two other cemeteries,—the one at the village of Killanaṭṭam about 3 miles north-east of Palamcottah, the other near Tiruthu, some 4 miles further on. All three areas yielded the same class of objects, but digging at Killanaṭṭam was fraught with so many difficulties owing to the unusually hard nature of the ground, that it was very soon abandoned. The collection of articles recovered at the other sites was a very extensive one, including the usual kinds of burial urns with their complement of smaller ceramic wares, gold diadems, iron weapons and utensils, bronze bowls, vase stands, dishes, cups and the like, together with beads and miscellaneous minor objects. Among these finds may be noticed, in particular, a bronze figurine of a woman with thick locks of hair falling down the back, and two novel types of ornamental bronze lids—the one with an antelope, the other with a flying bird as its *motif*. It should be added, however, that the female figurine was found near the surface of the ground and not inside an urn ; so that it may conceivably belong to a more recent date.

An interesting feature of the excavations at Ādittanallūr was the discovery of an extensive area of ashes, mixed with bones and horns of animals. It was covered over with about a foot of silted gravel, beneath which the deposit extended in places to a depth of several feet. Mr. Rea suggests that it may be either an ancient village site or a cremation ground ; but the large proportion of ashes militate much against the former theory. Presuming it to be a cremation ground, it raises an interesting question as to whether or not its use was contemporary with the adjacent burials. If it is, some sections of the people must have resorted to cremation, but, as has been pointed out before, no evidences of this are visible in the graves. Whatever the date of the deposit may be, the depth of the gravel which covers it proves it to be of great antiquity.

A detailed account of these operations in the Tinnevelly district is not included in the present volume for the reason that there is every prospect of the excavations being closed after another season's work, and all the results will then be collected together in a separate volume. In the meantime, however, according to the promise he gave last year, Mr. Rea has written a preliminary note on the chief types of pottery unearthed in the excavations of 1902-3. The chief merit of this note lies in the plates which accompany it, since the letter-press itself pretends to little else than an

enumeration of the specimens illustrated in them. But it is hoped that a fuller treatment of the subject will be forthcoming when the final publication is made.

Another excavation on a smaller scale in Southern India also deserves passing notice. This was among some early Jaina shrines at Dānavalapāḍu, on the left bank of the Pennar River, in the Cuddapah district. Some peasants, who were digging there for bricks, struck by chance upon the stone tiara of an idol, and, continuing the excavation, lighted upon some brick walls, which evidently belonged to a buried temple. This discovery led to the site being acquired by Government and an organised excavation being undertaken by the Archæological Department, of which the net result was as follows. Three shrines were unearthed standing, as is often the case with Jaina shrines, in a line. One of these shrines is built entirely of brick, while the other two have basements of moulded black stone. The one to the north, which is the smallest, measures $26\frac{1}{2}' \times 18'$; the dimensions of the other two being $58' \times 34'$. In the cella of the northernmost shrine was found a colossal white stone Tīrthaṅkara image, $9' 7\frac{1}{2}''$ in height, from the knees upwards, the legs below the knees being covered by a stone pedestal. Outside the ante-chamber was a beautifully sculptured white stone pedestal, crowned by a lotus and scroll ornament, and with the figures of a Tīrthāṅkara on each of the four sides. Other Jaina figures in the round, besides panels in relief, carved and plain pillars with bases and capitals, were found in and around the other shrines. On one of the images is a Kanarese inscription in three lines, part of which is illegible, mentioning the name of some *Devaru*, Adi Siddayya. The whole extent of the precinct in which these shrines stood has not been cleared, but to the north, at a distance of some 12 feet from the smallest shrines, there runs a long line of retaining wall from east to west, which evidently marks the boundary on that side. As far as it has been unearthed, this wall averages about 10 feet in height and extends for 117 feet in length, but its full height and length have yet to be discovered.

The unique hoard of antiquities from the Shwebawgyun Pagoda at Shwebo, which form the subject of a special article by Taw Sein Ko, belong to comparatively modern days, being scarcely 150 years old; but what they lack in respect of age is more than compensated by the exceptional richness of the collection and the intrinsic value of the majority of the objects. The circumstances attending their discovery, which was in a manner accidental, are not without interest. In December 1902, some thieves dug into the central Pagoda and into a small one at its south-east corner, and succeeded in carrying off valuable booty from the latter. Fortunately they were captured, and the elders then determined to open up the other two small Pagodas, and remove whatever contents they might possess to a place of greater safety. This was done, with the result that they secured a collection of over 1,300 objects, including those which had been recovered from the thieves. Most of the specimens are of silver or copper; but there is a large percentage also of gold, pinchbeck, brass, iron and amber; and many are ornamented with rubies, sapphires, pearls and other jewels.

Although these objects are invested primarily with a religious significance, many of them possess considerable historical value. Thus there are numerous models of boats, rafts, cavalrymen, foot soldiers, guns and weapons, which, though small and rudely fashioned, all serve to illustrate the equipment of the army and navy at that

period. The long inscriptions again on the silver scrolls, which were designed to record the dedication of the Pagodas and their relics, contain much besides which bears directly on the history of Alompra's kingdom. Among the purely religious objects, the relic caskets from the Pagoda to the north-east hold the most important place. These consist of six boxes, or rather bowls, fitting one inside the other—the outermost of brass, the next of copper, the next of silver, the next of pinchbeck, the next of gold set with emeralds, and the innermost of amber. The relics, which were placed in the last, are merely some fine gravel and a few small pearls and pieces of gold. Other objects of interest are a series of 28 Buddhas, including Gautama, sitting under their appropriate trees, and a number of other figures illustrating the main events in Gautama's life after his attainment of Buddhahood. Particularly striking is a figure of the Nāga King, Mucalinda, encircling and protecting the body of the blessed one in his folds (Pl. LII, Fig. 7).

Another small Pagoda in Burma, which yielded a certain amount of interesting material, was a little ruined structure, known as the Sudaungbye Pagoda, on the outskirts of the village of Taungbye, near Pagan. The relic chamber had, unfortunately, been already rifled of its treasure, but a great many clay votive tablets—some 250 in all—were found still adhering to its walls or lying in confusion on the floor. These tablets are of the familiar type, with representations of Buddha sitting cross-legged in what appears to be the temple at Budh Gayā, and the well-known Buddhist formula inscribed beneath. The spoliation, which this and the Shwebo Pagoda have suffered at the hands of thieves, has been the sad fate of most of the Pagodas in Burma. Were it not for this misfortune, the ruins at Pagan and elsewhere would afford one of the richest fields in the world for the archæologist—a field unsurpassed even by the royal tombs of Egypt or the cemeteries of Etruria. As it is, the excavator may open structure after structure of this type, and not draw a prize but once in twenty times.

Turning from actual excavation, we find that much has also been done during the past year in the matter of general exploration and survey work. Of the accurate and useful map which has been made of the remains at Basārh, as a preliminary to further excavation, I have already spoken. Another important survey is that of the vast ruins of Vijayanagar. The only map of this famous site, that has hitherto been available to archæologists, is the one published in Meadows Taylor and Fergusson's "*Architecture in Dharwar and Mysore*," which is sadly deficient in detail. The new map, which is now being compiled, and a small section of which is reproduced in Pl. XXIII, has been in preparation since 1902, and will, it is hoped, be brought to completion in the course of another year. The operations of the past season have been confined to that portion of the site which lies in the Bellary district, where an area of about 50 miles, comprising eight villages and nearly three thousand fields, has been surveyed.

As regards the more elaborate drawings of individual buildings and their details which used to be a special feature of the Department's work, a general check has been put upon their preparation, since it was felt that no useful purpose could be served by the further accumulation of drawings, which there was no immediate prospect of publishing. Excepting, therefore, the survey of the Palace buildings at Mandalay, of which, in view of their perishable nature, it is all-important to possess some careful records, work in this particular branch has been either in continuation of surveys already begun

in former years and which it would have been undesirable to suspend altogether, or in immediate connection with excavations and conservation work. Thus, on the one hand, the detail survey of the Mughal Palaces in the Agra Fort has been slowly continued; while, on the other, numerous drawings have been made of the remains excavated in Madras and Bengal and of various structures which, for one reason or another, it has been decided not to conserve.

Another phase of exploratory work is that which relates to the systematic inspection and listing of the multitudes of monuments throughout the country. Most Indianists are acquainted with the fairly complete catalogues which have already been published of the antiquities in the Madras and Bombay Presidencies, the Nizam's Territory, the Central Provinces and Berar, and the United Provinces; and they may be acquainted also with the somewhat rougher lists of the remains in Bengal and Burma. The preparation of these catalogues is an essential preliminary to conservation work, since it is impossible to attempt an effective programme of repair without first taking careful stock of the material Accordingly, a great effort is being made to hasten on the volumes for the rest of India, and at the same time to make them more generally useful for conservation purposes by adding descriptive details of the present state of the monuments and of the steps to be taken for their repair. The past twelve months have seen the lists for Kashmir and Chambā State brought to completion and provisionally published in the Provincial Report of the Punjab and United Provinces Circle. The revision of the catalogues for the Central Provinces and Bengal was also pushed on, and in the latter circle a beginning was made with the systematic listing of all known inscriptions. This list is to contain the date, substance matter and place of deposit of each record, and it will eventually be incorporated in a revised edition of the Provincial Catalogue of Monuments.

Such is the year's sum of labour in the matter of survey and excavation, and it remains only to notice the several special articles contained in the following pages which relate to miscellaneous subjects of research. Two of these deal with the all important question of irrigation in India: the one relating to Madras, the other to Baluchistān, and both serve in a certain degree a utilitarian as well as an archæological purpose. A third contribution relates to the famous Mughal Fort at Agra, and the collection of native authorities which the writer, Nur Bakhsh, has now brought together helps to throw much new light on the history of the palace and other buildings there. In another article Dr. Vogel publishes a series of Buddhist sculptures from Benares, which, though not belonging to the best period of glyptic art, contain among them some exceptionally fine specimens of carving, the interest of which is heightened by the presence of dedicatory or other inscriptions. Finally, in a paper entitled "The Makara in Hindu Ornament," Mr. Cousens traces out the origin and development of perhaps the most ubiquitous and striking *motif* in all indigenous Indian architecture. For the varied information which these contributions contain, the reader must be referred to the articles themselves, since they are not of a kind which could be usefully summarised, nor is there any of them which calls for particular mention more than the others.

J. H. MARSHALL.

EXCAVATIONS AT BASARH.

THE excavations at Basarh in the Muzaffarpur district of Bengal, the supposed site of the ancient city of Vaiśālī, were carried out in the months of December, January, and February of 1903-1904 at the cost of R1,500-7-6, which were met from a grant out of the Imperial allotment for Archæology. They were conducted as trial excavations only, with a view to ascertain what results are likely to be expected from a complete exploration of this ancient site, and it is intended to continue the work on a systematic scale in subsequent seasons. The opportunity of a prolonged stay at Basarh has also been made use of to survey the whole area—about 24 square miles in extent—within which we may look out for the places seen and described by the Chinese pilgrims. As a result of this survey the map on Plate XXXI is published with this article. It is hoped that this map will be found more useful than previous ones by those interested in the topography of Hiuen Thsang, as it can lay claim to exactness in regard to every detail.

Ancient Vaiśālī and its modern sites.

Since M. Vivien de St. Martin and Gen. Cunningham first pointed to the ruins at and near Basarh[1] as the remains of Vaiśālī, the capital of the Licchavi Kings, this identification has been more or less generally accepted. Only recently doubts have been raised against it. Professor Rhys Davids held that it was quite uncertain, and that we still had to search for Vaiśālī somewhere in Tirhut; Dr. Hoey proposed Cherand in the Saran district as the site of Vaiśālī, while Mr. Vincent Smith thought that "the evidence in favour of the current belief was presented by Cunningham in such an unconvincing fashion that it was impossible for his readers to feel assured of the identity of Vaiśālī, and Basār."[2] On re-examining the question in the light of old and new evidence, he once more came to the conclusion arrived at by previous authors, and established convincingly, as I think, the identity of Basarh with Vaiśālī.

For this reason I consider it unnecessary at present to discuss the whole line of arguments for and against this identification, and I shall limit myself to a description of the ruins as I found them and their bearings upon the topography of ancient Vaiśālī.

[1] The correct spelling of the name is Basāṛh or Basāṛ. Gen. Cunningham in selecting the misleading form Besarh was partly influenced by the name given in Gladwin's *Ain-i-Akbari*, partly by the similarity of the first syllable to the beginning of the Pāli form "Vesāli."

[2] *J. R. A. S.*, April 1902, p. 267.

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There exists, I believe, a general consensus of opinion that the modern site of Vaiśālī must be searched for somewhere in Tirhut, the present districts of Muzaffarpur and Darbhanga, the ancient country of Tīrabhukti. We find among the inscribed miniature paintings of two palm leaf manuscripts of the 12th century, which M. Foucher has made known to us, the inscription: *Tīrabhuktau Vaiśālī-Tārā*: "the Tārā of Vaiśālī in Tīrabhukti"[1] Here then we have a direct proof that even as late as the 12th century Vaiśālī was known to have been in Tirhut. To go back to earlier times, we must remember that Mahāvīra, the last of the Jaina Tīrthaṁkaras, is called *Vesālie*, "a native of Vaiśālī" in the Jaina scriptures, and that it is also related there that his birth-place, Kuṇḍagāma, lay in Videha.[2] Videha and Tīrabhukti, however, are used almost synonymously by ancient authors. An identification of Vaiśālī with a place outside the borders of Tirhut, such as Cherand in Saran[3] west of the Gandak, therefore, appears *primâ facie* very unlikely, the more so when there is an ancient site in Tirhut which fulfils all the necessary requirements. Mr. Vincent Smith has already shown that the position of Basarh in regard to other places like Patna, etc., fits exactly with the position of Vaiśālī in regard to Pāṭaliputra and similar localities visited by the Chinese. There are, moreover, two groups of ruins near Basarh, which

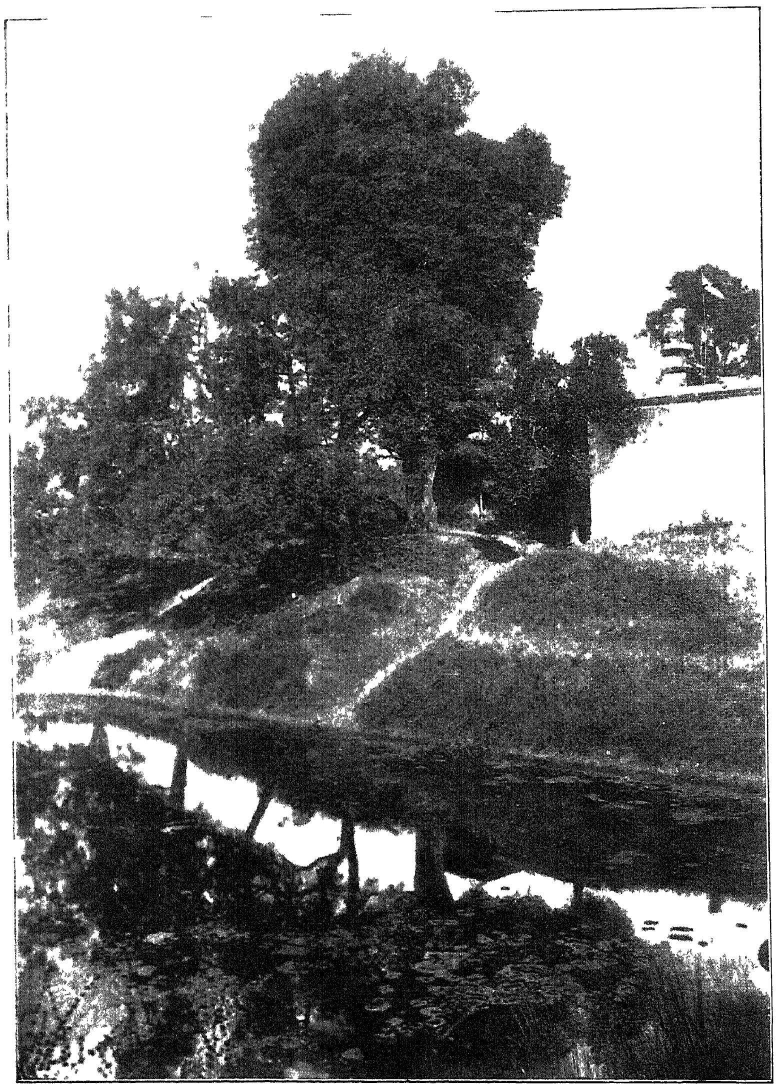


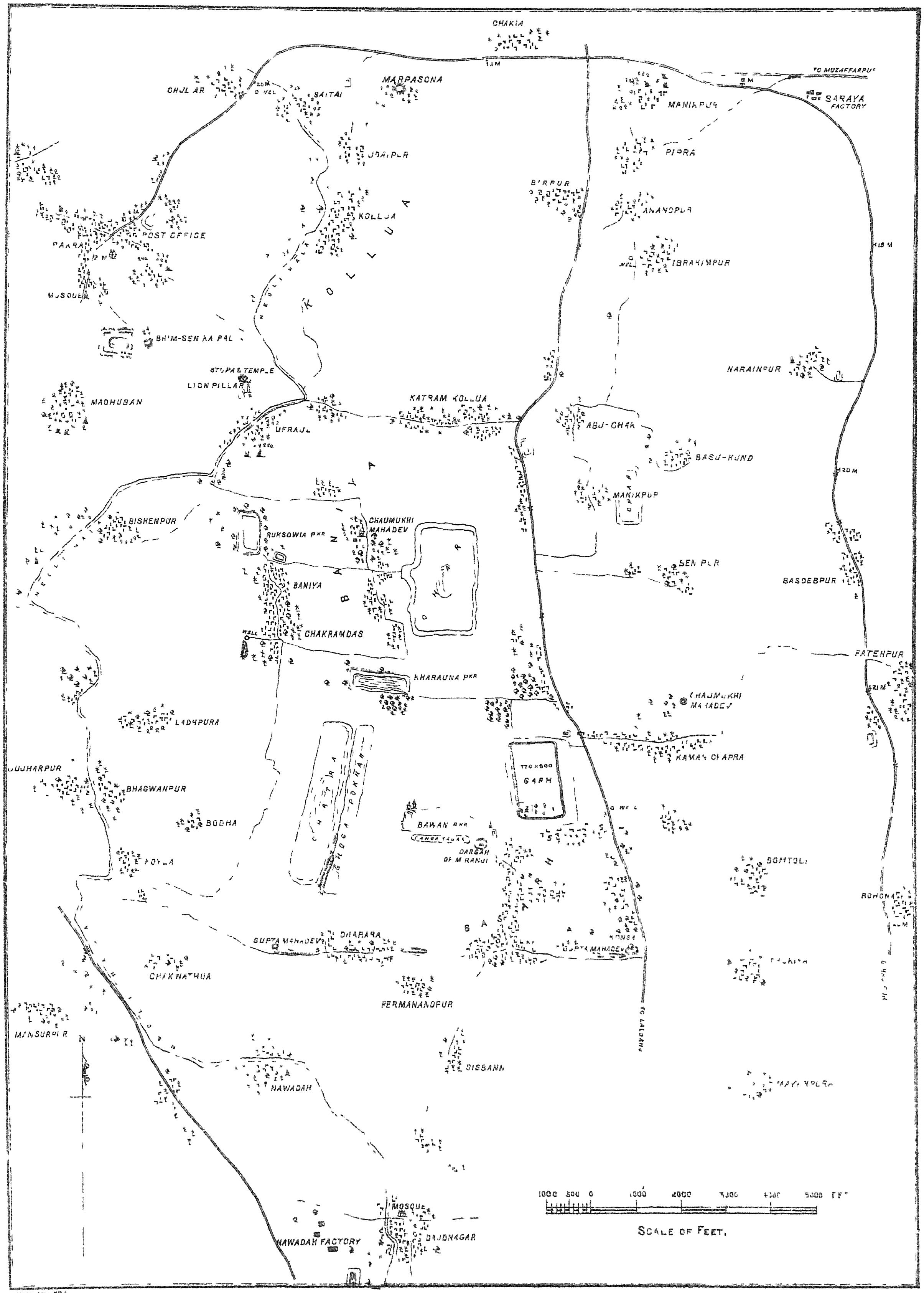
Fig. 1: Markaṭahrada and Lion pillar.

[1] *Études sur l'iconographie Bouddhique de l'Inde* (Paris 1900), p. 197, No. 43, and Plate VII, 1; see also p. 178.

[2] *Sacred Books of the East*, Vol. xxii, p. X.

[3] There is no proof that this district in ancient times was included in Tīrabhukti. The linguistic evidence also is against it. The modern dialect of Tirhut is Maithilī, that of Saran, Bhojpūrī; see Dr. Grierson's *Linguistic Survey*.

MAP OF BASARH AND ADJACENT VILLAGES.



correspond with two similar groups, seen by Hiuen Thsang at Vaiśālī, in such a striking way that it would be in vain to search for any other place in Tirhut as a possible site of Vaiśālī. I refer to the Fort of Rājā Bisāl, north of Basarh, and the Lion pillar, Stūpa and tank east of Bakra,[1] which, however, actually lie within Mauza Kollua. The modern fort, which in its name *Rājā Bisāl kā Garh* still preserves the name of *Viśāla*, the founder and *heros-eponymous* of Vaiśālī, agrees in its circumference of something less than 5,000 feet with the distance of 4 to 5 li, which Hiuen Thsang gives as the circuit of the palace of Vaiśālī. The second group lies about two miles to the north-west of it. There are very few ruins in India which so closely resemble the descriptions of Hiuen Thsang, and which can be so easily identified. We still have the pillar crowned by a lion, said to have been erected by Aśoka, and it matters little that Hiuen Thsang puts down its height at 50 or 60 feet, while at present it is only a little over 30 feet above ground. North of it are the remains of a brick Stūpa, and to the south an ancient brick-faced tank, corresponding to Hiuen Thsang's Stūpa of Aśoka and to the Markaṭahrada, or "Monkey tank," respectively [Plate XXXII (*a*) and Fig. 1]. The distance of the second group from the fort is about two miles. It is true that Hiuen Thsang's account omits the distance, but we know at least so much, that the second group lay to the north-west of the palace and that its distance exceeded one mile.[2] A more striking coincidence can hardly be imagined. It would be absurd to believe that a second place existed somewhere else in Tirhut with two groups of ruins, which would tally as well with Hiuen Thsang's account of Vaiśālī. Certainly no trace whatever has been left of such a place. To my mind, therefore, there is no doubt that the ruins of Vaiśālī seen and described by Hiuen Thsang lay at Basarh and in its neighbourhood. To admit this, however, comes to the same as admitting the identity of the modern site with the ancient city of Vaiśālī [3]

Mr. Vincent Smith in his article above referred to has tried to locate the ruins of Vaiśālī described by Fa-Hien and Hiuen Thsang, and to indicate on the modern map where those places have to be looked for. The following account will show what amount of success we may expect from such a search.

At a distance of one mile (5 to 6 li) north-west of the palace, Hiuen Thsang mentions an important group of ancient remains, consisting of a monastery of the Saṁmatīya school of Buddhist mendicants and three Stūpas, the first of which commemorated the spot where Buddha delivered the Vimalakīrtti-Sūtra, the second the place where Sāriputra attained *arhat*-ship, while the third contained the share of Buddha's body relics received by the Licchavis after his cremation. The remains of these buildings, according to Mr. Vincent Smith, "must all lie in a compact group between the Kharonā tank and the village of Pharāwal, *where a large mound exists*."[4] The last statement evidently rests on the authority of Babu P. C. Mukherji, who visited

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[1] This is the spelling adopted by the Postal authorities. There is a post office in the village. Cunningham spelt the name Bakhra.

[2] The Saṁmatiya Vihāra and adjacent buildings lay one mile (5 to 6 li) north-west from the palace. Going from there further on in a north-westerly direction the pilgrim came to the Lion pillar with Stūpa and tank.

[3] The name Vaiśālī occurs probably in three of the inscriptions on ancient clay seals of the 4th and 5th centuries A.D. which I found during the excavations. This point will be noted fully in the fourth chapter of this account dealing with the seals.

[4] The *italics* are mine.

Basarh in November, 1897. I have not been able to verify this assertion. Repeated enquiries did not elicit the slightest memory of the existence at this locality of a mound which evidently, if it had been there in 1897, must since have been used as a quarry for bricks, and not the least surface indication remains at present in the direction where this mound ought to be looked for. There exists merely east of the modern village of Baniya a low depression, called a "char" (*cār*), with a little water in its centre. This evidently is the remains of a tank, which may have belonged to the monastery, but the fields all around it show no signs of bricks and are all under cultivation, neither could I find any traces of brick-buildings inside the groups of mango trees west of the "char". The village Ufraul—this is the correct pronunciation, not Pharāwal—does not contain any old mound either, and its distance from the fort is too great compared with the 5 to 6 li of Hiuen Thsang. The unavoidable conclusion therefore must be that all traces of these ruins have been removed long ago, and it is very unlikely that trial excavations, conducted without any surface indications, would yield any result here.

The next group of ruins is the Lion pillar, Aśoka's Stūpa and Markatahrada already referred to. As to their location no possible doubt exists. The brick-faced Monkey Tank, which now goes by the name of *Rām-kund*, measures 200 by 100 feet. The present height of the Lion pillar above the surface is 30 feet 6 inches. It is very likely that it contained an Aśoka inscription, which has been lost owing to the surface peeling off. Cunningham dug down to a considerable depth around the shaft, but did not find any traces of the inscription. The modern temple or hut on top of the brick mound, containing the remains of the Aśoka Stūpa, enshrines a statue of Buddha wearing a crown and necklace It can hardly be called a life-size image, as its measurements are only 4 feet 4½ inches by 2 feet 1 inch. The Buddha is represented seated, in the *bhūmisparśa mudrā*. I have not been able to find the small figure of a monkey presenting honey to Buddha on the pedestal, which Lieutenant-Colonel Waddell observed (Vincent Smith, page 276). There is merely a kneeling devotee on the pedestal. The inscription—besides the usual creed—is written in characters of the 12th century A.D. and records that the statue was a gift of the writer (*karaṇika*) Utsāha, the son of Māṇikya It runs as follows :—

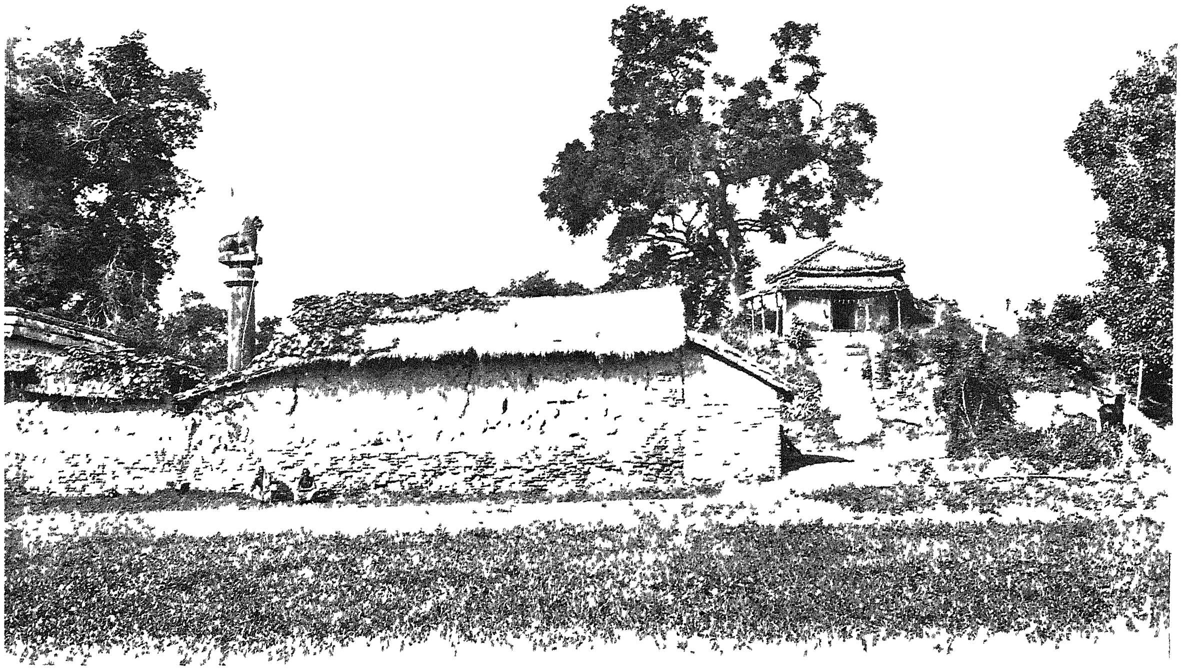
(l 1) Deya-dharmmo-yaṁ pravara-mahāyāna-yāyinaḥ karaṇika-Ucchāhaḥ (*read* Utsāhasya) Māṇ [i] kya-sutasya. Yad-atra puṇyaṁ tad-bhavatv-ācāry-opādhyāya-mātāpitror-ātmanaś-ca pūrvvangamaṁ[1] kr-

(l. 2) tvā sakala-sa[t*]tva-rāśer-anuttara-jñān-āvāptaye (*read* -ya) iti ||.

As regards the type of the statue representing Buddha with a crowned head and a necklace, it is exceedingly common among the Buddhist statues of the Pāla time found in Bihar. A statue of this kind representing Buddha standing, right hand in *abhayamudrā*, with two attendant Arhats and two small Stūpas, is shown on Plate XXVI of Cunningham's Mahābodhi, where it is labelled "Buddha teaching." The statues of this type show all the various positions and attitudes of those of the ascetic Buddha, but invariably have the head-diadem and the necklace. I have not been able to find an explanation of this difference and do not know which particular Buddha they represent. Various suggestions have occurred to me, but all are uncertain; thus that the crowned Buddha means Maitreya, who has not yet put on his yellow garb, or that it was the habit

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[1] Read *mātāpitṝn pūrvvaṁgamān*, cancelling *ātmanaś-ca*. The author probably intended to continue with *puṇyābhivrddhaye*, but dropped into the other often used imprecatory formula.





Photogravure

Survey of India Offices Calcutta April 1905

(a) LION PILLAR WITH STUPA NEAR BAXRA

(b) RAJA BISAL KA GARH SOUTH-WEST CORNER

of one particular sect to represent Buddha, not as a mendicant but with crown and ornaments in order to exhibit his divine nature. All this is nothing but mere guess work, and we still have to wait for the true explanation.[1]

The image near the Lion pillar was dug out from the fields north of the Stūpa, on the top of which it now stands, and this site so far bears many indications of the existence of ancient remains below its surface. Bricks are said to abound at a depth of several feet, and excavations seem to be promising here. Broken bricks likewise cover the ground east and west of the Monkey Tank. Evidently they formed the materials from which the small memorial Stūpas, mentioned by Hiuen Thsang at this place, were built. The same author also describes the statue of a monkey offering honey to Buddha, which he saw near the tank, and which has now disappeared. It is likely that it existed several centuries later, for in the miniature painting of the Tārā of Vaiśālī, published by Foucher (see above) we find the scene of the honey offering represented by the side of it.

The same difficulty that was felt in regard to the location of the Saṁmatīya Vihāra and its adjacent Stūpas, exists also in respect of all the remaining ruins of Vaiśālī mentioned by Hiuen Thsang after the Lion pillar group. Evidently here, as in so many other places, vandal digging for bricks has been the chief source of their destruction. The houses of the wealthier inhabitants of the villages of Basarh, Baniya, and Kollua have been built up with old bricks. Even in 1835 Mr. Stephenson wrote[2]:—"I have no doubt but it (*i.e.*, the Lion pillar) is anterior to the mounds of brick rubbish by which it is surrounded and which extends for the space of several square miles in all directions. The numerous magnificent (though old) tanks, amounting to about 50 in number, large and small, strengthen the general opinion that this place is the site of a large city, at a remote period inhabited by a numerous and civilized, wealthy people." This statement, even if it were somewhat exaggerated, sadly testifies to the destruction that must have occurred to the ruins of Vaiśālī during the last century. In the following descriptive account of the ruins it will be unnecessary to follow Hiuen Thsang any further, as I found it impossible to locate any more of the ruins described by him from surface indications, and I shall merely mention what remains now exist within the area represented by the map on Plate XXXI.

Starting from the Lion pillar one meets at a distance of about half-a-mile north-west of it two earthen mounds standing on the eastern bank of a large tank (see Fig. 2). They are called *Bhīmsen kā pallā* as they are believed to be two baskets dropped there by Bhīmsen, the pillar being the staff on which he carried them. What they contain, if indeed anything, has still to be proved. The theory of "earthen Stūpas" is often put forward with regard to similar heaps of earth, but still awaits confirmation.

From their outward appearance, they resemble the mounds at Lauriya north of Bettiah in Champaran, which certainly are not Stūpas. Another earthen mound, called Marpasona, lies north of Kollua. It is less hemispherical in shape and

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[1] Regarding this type of Buddha, see Dr. Vogel's paper on some "*Buddhist Sculptures from Benares*" below; also *Prog. Report of Arch. Survey, Western India*, 1903-4, paras. 104 & 106, and *id.* 1893-4, para. 31.

[2] *Journal of the Asiatic Soc. of Bengal*, Vol. iv, p. 129.

[3] I do not accept all the identifications proposed by Mr. Vincent Smith. Thus, as I understand Hiuen Thsang, he also, like Fa-Hien, places the garden presented to Buddha by the courtesan Āmrapālī or Amradārika to the south of the city. For the purpose, however, of the present article, it is unnecessary to enter into details in regard to these points.

somewhat lower. East of the village of Kollua, some 10 or 12 feet below a field, which was just prepared for indigo, people say that many remains of brick buildings were found a considerable time ago. It is not unlikely, as suggested by Mr. Vincent Smith (*l c.* p. 280), that they belonged to the famous Kūtāgara Hall, although the distance from the Markaṭahrada, near which we ought to look out for this building, seems somewhat excessive. The site, however, certainly deserves future attention. The modern village of Bakra has no ancient statues in its four temples, and apart from the crowned Buddha described on page 84 and another fragmentary Buddhist image

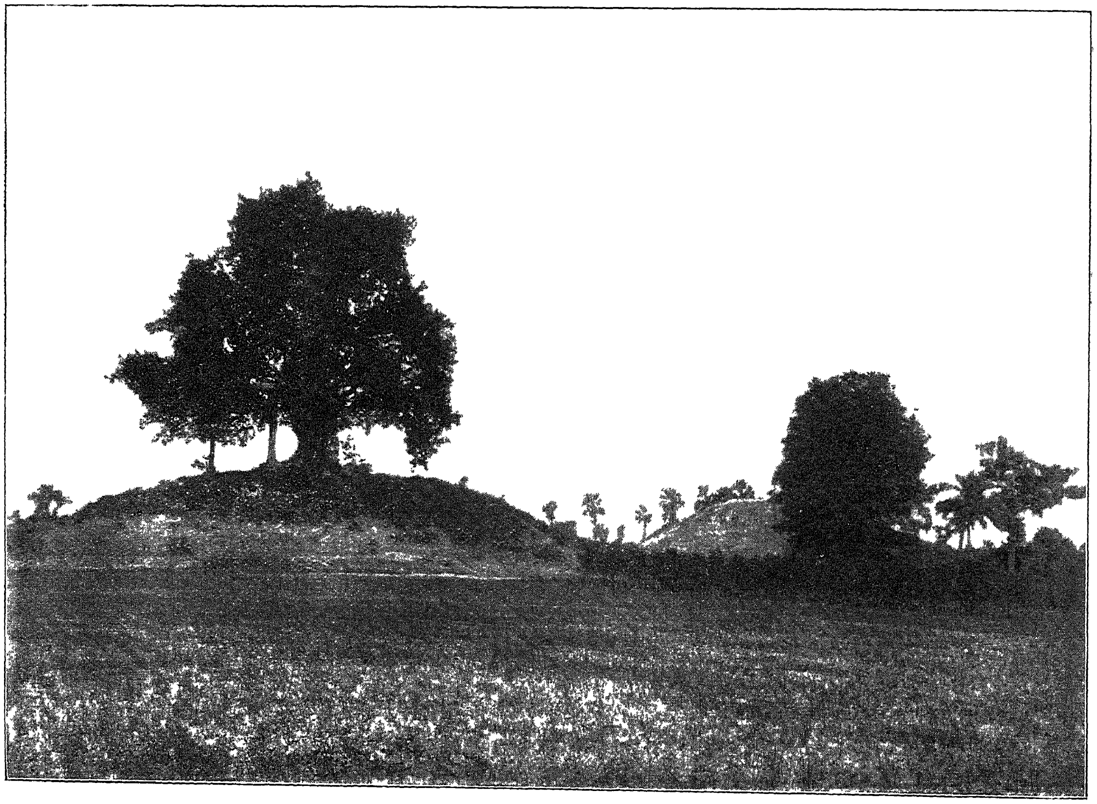


Fig. 2: Bhīmsen kā pallā.

mentioned by Stephenson,[1] I know of no other statues, either Buddhist or Brahminical, that have been dug up among the ruins near Bakra and Kollua.

In the southern section of the city the fort of Rājā Bisāl is by far the most important ruin It will be dealt with in the next chapter. South-west of it stands an old brick Stūpa, now converted into a Dargāh, where both Hindus and Muhammadans worship. The name of the saint, who is supposed to have been buried there, was given to me as Mīrān-jī, a mere title and a clear proof of the legendary origin of the saint. This Stūpa, though a monument of considerable importance, is not referred to by the Chinese. West of it, on the border of the Bāwan Pokhar, is a modern temple, where seven mediæval images, said to have been dug out from the tank, are put up. They are: two seated Buddhas, one Bodhi-sattva, one Visṇu, one figure of Śiva-Durgā, one Gaṇeśa and one slab with the seven mothers (*sapta mātarah*)

[1] *l. c.* p. 131 and Plate IX.

Inside the modern village of Basarh are remains of several old brick buildings, now covered by modern houses. An old embankment runs between the two long sheets of water, called Ghoga Pokhar and Chatra, west of the Bāwan Pokhar. The banks of the Kharauna Pokhar are covered with broken bricks and traces of buildings are likely to be found here. A few low mounds covered with *débris* exist to the south-west of Chakramdas, the southern portion of the large village of Baniya. The old dry bed of a river, called Neori Nala, which can be followed for a long distance west of Kollua, Baniya and Basarh, is now entirely under cultivation. Its breadth is about 150 feet. The north-eastern section of the map is bare of any signs of ancient remains.

According to modern tradition, the four corners of the ancient city of Vaiśālī are marked by four *lingas* or *Mahādevas*, of which the two northern ones are visible and the two southern ones hidden. Hence their name Gupta Mahādeva. Their position will be best seen from the map. The ancient city would thus have formed an irregular quadrangle, the eastern side measuring about two-thirds of the western, and the modern village of Baniya as well as the Lion pillar would have been outside the city proper. Whatever truth may be attached to this tradition, it is difficult to reconcile it with the descriptions of the Chinese. There are traces of an old earthen rampart between the two Gupta Mahādevas. The north-eastern linga is an old Caumukhī Mahādeva, with four faces, which stands inside a pit, evidently the remains of a brick temple. The north-western one is of white marble and modern. It seems to enjoy considerable sanctity. At the Śivarātrī festival all the inhabitants of Basarh went there to do *pūjā*.

It is a remarkable fact that the modern site of Vaiśālī, the traditional birth-place of the last Tīrthaṁkara of the Jainas, Vardhamāna Mahāvīra, is entirely devoid of any remains belonging to this religious order. Neither has it become a place of pilgrimage to the Jainas in modern days, such as Pāwāpurī, in the Patna district, where Mahāvīra died, or Campā near Bhagalpur. At the time of Hiuen Thsang's visit, about 635 A.D., Nirgrantha monks still lived at Vaiśālī. Mr. Vincent Smith tells us (*l. c.* p. 282) that "some ten years ago two statues of Jaina Tīrthamkaras, one seated, the other standing, were discovered about eight feet below the surface," 500 yards west of Baniya. I do not know upon what authority this statement rests. The only thing I could discover was that two images had been placed inside a mud hut in the south-western corner of Chakramdas, from where they had been taken away more than ten years ago. Nobody could give me any information as to what they represented, although the floor of the hut was still pointed out, and Mr. Garrick, who refers to them, tells us that he arrived late in the evening at the village, when it was too dark to discern these statues.[1]

An attempt has been made to locate the various quarters and suburbs into which the ancient city of Vaiśālī is supposed to have been divided during the earliest time of Jainism and Buddhism. The large and important village of Baniya, north-west of Basarh, seems to preserve the ancient name of *Vāṇiyagāma*, evidently one of the sections of Vaiśālī. In regard to *Kuṇḍagāma* scholars are divided and Prof. Jacobi

[1] *A. S. R.*, Vol. xvi, p. 91.

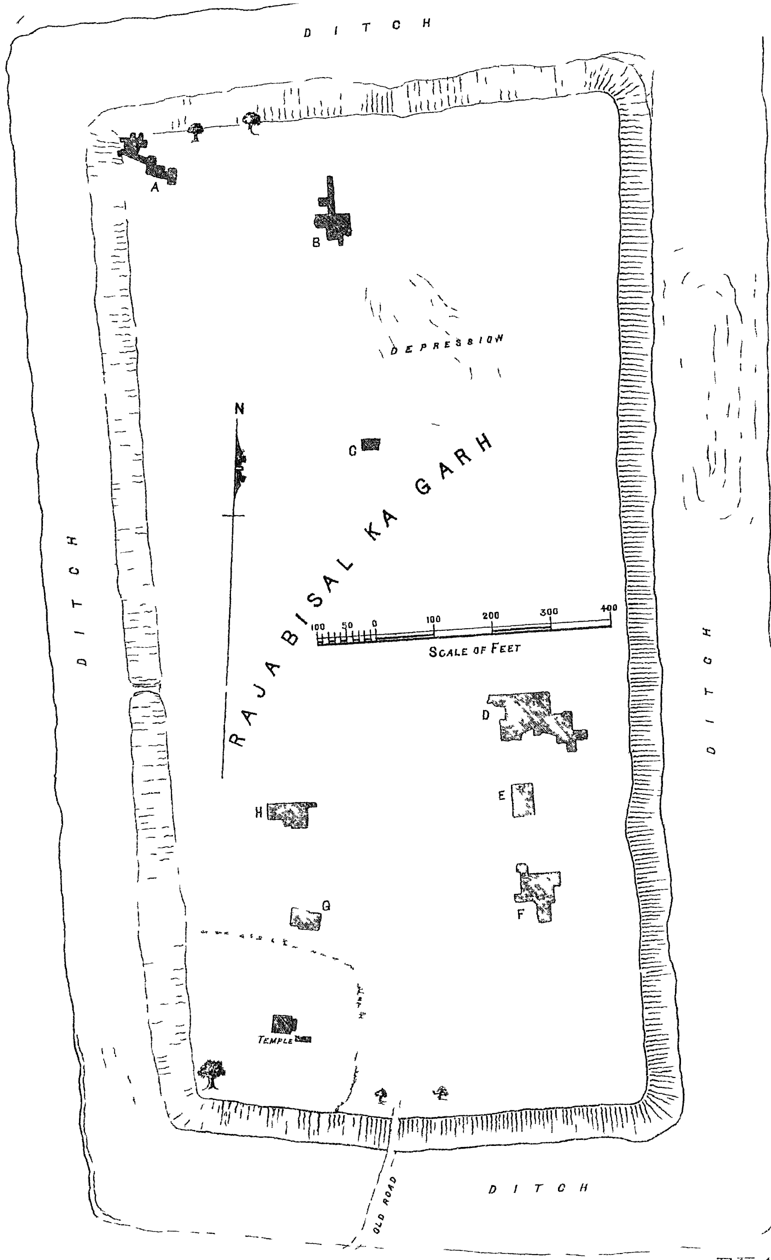
informs me that he still adheres to his opinion that the word is merely another name of Vaiśālī, or of a small suburb of it. The suggestion that it is now represented by Basukund, a small hamlet north-east of Basarh, has little to recommend it. It is likewise uncertain whether the name of Kollua, an important village north of Baniya, should be derived from Kollāga, a suburb of Vaiśālī, where Mahāvīra was born

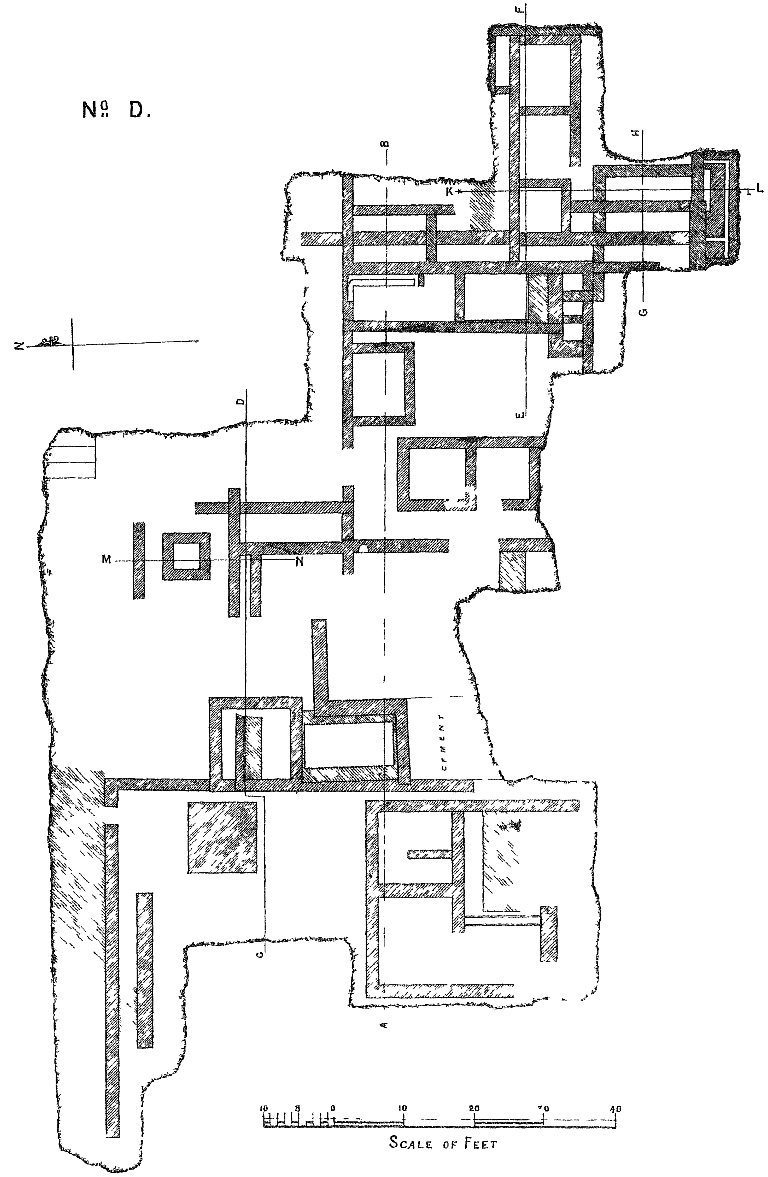
Soon after the rise of Buddhism, the importance of Vaiśālī seems to have been overshadowed by Pāṭaliputra, the seat of the Nanda and Maurya kings It is impossible to decide whether the Licchavis, with whom Candragupta I formed a matrimonial alliance early in the 4th century A D , resided at Vaiśālī, the ancient seat of the clan, or whether they belonged to the Nepal section, which appears in history later on. They certainly at that time were far more influential and powerful than the family of petty chiefs from which Candragupta I. had sprung. During the reign of the Imperial Gupta kings Vaiśālī very likely formed the head-quarters of one of the districts of their empire, evidently of Tīrabhukti The seals of officials, which have been found in the fort of Basarh, and which will be discussed in the fourth chapter, very probably were attached to letters addressed by Imperial officers to the governors or chiefs of that district residing at Vaiśālī. We find among them certain officers who are distinctly defined as being in charge of Tīrabhukti, and also an official in charge of the Government of Vaiśālī, perhaps a city Magistrate The great number of other seals, attached to letters sent by merchants and bankers, point to considerable commercial transactions that were conducted in those days between the chiefs of Vaiśālī and important traders, evidently from Patna and other cities. The breakdown of the Imperial line of Gupta kings seems to have carried with it the desertion and ruin of Vaiśālī. But for several centuries it continued a sort of struggling existence. When Hiuen Thsang visited the city in 635 A D., it was more or less in ruins and the palace was inhabited by a few people only. That Buddhists remained there probably until the conquest of the country by the Muhammadans is testified by the Buddhist images, which have turned up among the ruins and which belong to the end of Buddhist history in India, and by the miniature painting of an image of Tārā at Vaiśālī with a representation of the scene of the honey offering to Buddha, to which reference already has been made above (pp. 82 and 85)

Excavations in the Fort of Basarh.

The trial excavations at Basarh have been limited to the Fort of Rājā Bisāl, where altogether eight trenches have been dug, to which in the following account I shall refer under the letters A to H (see plan of fort on Plate XXXIII). Each of the eight trenches disclosed a great variety of brick foundations, among which two distinct strata could be easily distinguished. Most of these were struck upon at a depth of 5 feet or over, below surface The brick walls then continued down to 10 or 12 feet, only in one place we had to dig as far down as 24 feet, when we came upon water. The buildings, to which these foundations belonged, cannot be later than the time of the Imperial Gupta kings, for it was in a chamber belonging to this stratum that the clay seals with inscriptions in the alphabet of the 4th and 5th century A.D. were found at a depth of 10 feet in trench No. D (see below). The partially ruined houses of the palace, which Hiuen Thsang saw in 635 A.D., must have formed part

PLATE XXXIII





EXCAVATIONS AT BASARH

of the same set of buildings. Above this stratum in some places later remains have been found. They, like the earlier ones, consisted merely of foundations of brick buildings with remains of cement floors here and there, which began at a little depth below the surface and did not continue for more than 5 feet. The exact age of this second stratum cannot be determined. No coins have been found except a small copper coin of Ḥusain S̲h̲āh of Jaunpūr (A.D. 1458-1476). The place altogether seems very unpromising in this respect. A current rumour of a large find of gold coins made several years ago, but divided among the finders and the local police-officers, can only be taken for what such rumours are worth. I feel, however, inclined to look upon the later buildings as remains of the Muhammadan time, partly because fragments of glazed pottery of a Muhammadan type were found at or near them, partly on account of the size and shape of the bricks, which generally were square and much thinner than the large oblong bricks of the earlier remains, some of which measured $16\frac{1}{4}$ by 10 inches in length and breadth, and 2 inches in thickness.[1]

Before entering into details, it will be necessary briefly to describe the fort as it now appears. A view of its south-western corner is given on Plate XXXII (*b*) and a plan on Plate XXXIII.

The Fort of Rājā Bisāl forms an oblong plateau the longer sides of which run almost directly from north to south. As the angles slope down considerably, any measurements recording its length and breadth will be more or less arbitrary. The total circumference, however, will always remain less than 5,000 feet.[2]

The height varies likewise. It is generally 15 feet above the level of the ditch near the edges, but, as the surface is undulating and the ditch a little less than one foot deep, the average height above the level of the surrounding fields cannot be more than 12 feet. A little north of the centre is a marked depression where apparently water collects during the rains and forms the earth into a sort of clay. This looks like the remains of an old tank. The edges have a considerable slope and there are no traces of the ramparts or bastions, which Cunningham believed he was able to discern.[3] The ditch varies between 100 and 150 feet in breadth. At two places distinguished as such on the plan, water seems to remain all the year round. Other parts have been turned into rice fields. An old embankment leads through the southern side of the ditch into the fort. It must mark an old high road. Apart from its south-western corner, where a temple has been erected and the ground around it has been cultivated, the fort is a barren area, thickly covered with bricks and small bits of pottery, and with scanty vegetation here and there. It is evident that for this reason the fort formed the most suitable spot for excavations, the other sites mentioned in the preceding chapter being generally wanting in surface indications, or for some other cause more difficult to explore. The temple in the south-western corner must have been erected in 1835, as Stephenson, who wrote in that year, mentions it as half finished.[4] Its images are of brass and only a few centuries old. I understood from the priests that they were a present given by some Mahārāja of Rewah.

[1] Mr. Cousens remarks that these large square bricks were, and still are, made by the Muhammadans in Sind. [Ed.]

[2] I made out the northern and southern sides as 757 and 780 feet, and the eastern and western sides as 1,695 and 1,650 feet, respectively. This gives a total of 4,882 feet.

[3] *A. S. R.*, Vol. i, p. 56.

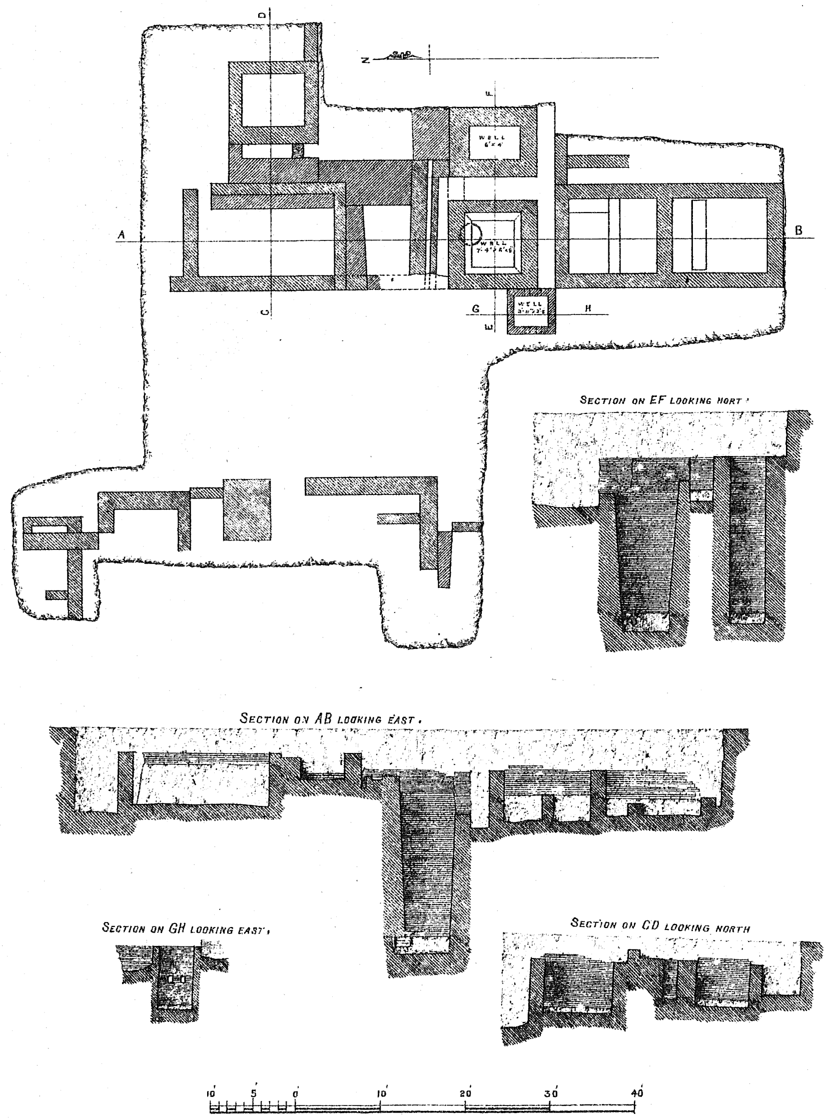
[4] *J. A. S. B.*, iv, p. 129.

The first trench A in the north-western corner of the fort revealed in its eastern portion the broken foundation walls of several small chambers measuring 8 and 10 feet in one direction. They consisted of a few courses of medium-sized bricks, and traces of cement floors also remained. To judge from the size of the bricks and their position close to the surface (not deeper than 5 feet), the buildings, to which they belonged, must be attributed to the second stratum. Close to them were found two crushing stones and several pestles, just like those which are now used for preparing curry. Continuing the trench towards the corner of the fort, we came upon the northern wall of a larger room, 20 feet long, with fragments only of the eastern and western walls. To this was joined a smaller chamber to the north, 8 by 10 feet, the north-western corner of which was broken. From its eastern wall runs another line of brick-wall to the east double its thickness (*i.e.*, 6 feet), which was followed up for a distance of 11 feet, when it was found to be broken. All these walls consisted of a few courses of bricks only. They were found on the same level as the former ones, and evidently belong to the same age. It looks as if the thick line of wall formed part of the enclosure of the citadel. There was, then, no corner bastion at this place, but merely a set of guardrooms or something like it.

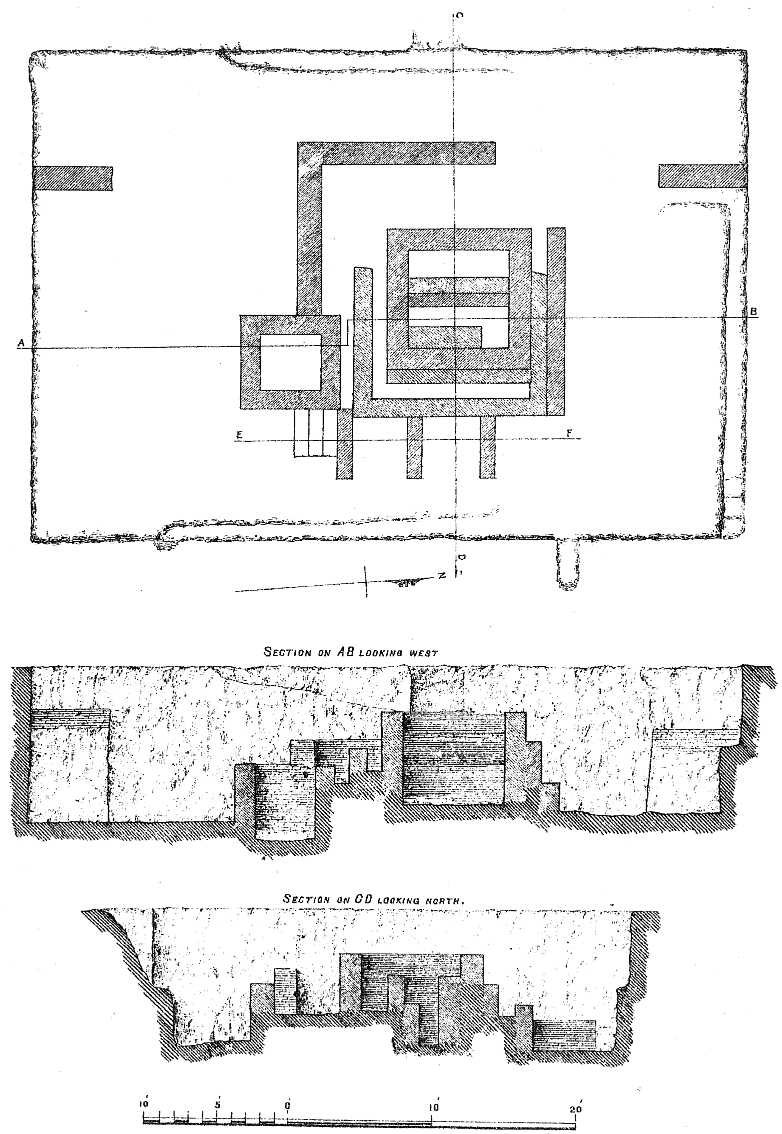
In selecting the next spot, B, I was guided by a certain indication on the surface. There was a depression in the ground, about 27 feet square, which looked as if it marked the site of a square building. People also said that a temple had stood at this place. My excavations, however, proved that this indication was misleading. The remains which I found here all lay in the south-eastern corner of the supposed square, and the raised ground along the four sides of the depression did not reveal any masonry beneath. The building, of which the foundations were disclosed, also belonged to the second or later stratum. It consisted of a room, measuring 23 by 15 feet, with a smaller chamber attached to its eastern and western sides. The eastern chamber measured 14 by 8 feet; the length of the western one could not be determined. They were connected with the central room by doors, 3 feet wide. Traces of cement pavement still existed, and further chambers seem to have been connected with them in a southerly direction. A very curious brick platform, 4 feet square, was found to the west, close to the western chamber. It is shown on Plate XXXVI(*a*). It was made by one course of bricks laid flat upon the ground, and the sides were surrounded by one line of bricks placed edgewise around the square. Several earthen vessels were dug out close to it. Their number exceeded half a dozen. May we surmise from this fact that the platform was used for bathing purposes? It would have been too shallow to be used as a water tank. The foundation walls of this building stopped at a depth of 5 feet. Continuing the trench to the north we struck upon a line of wall running in a north-easterly direction. It was found at a depth of 9 feet, and must have belonged to a building of the earlier time, over which the other building had been raised at a later date. Broken fragments of walls of the same age were found close to it, and another line also running from east to west some 40 feet further north. This again had a parallel line of masonry, but of higher level and evidently later in date. Near the north-eastern wall of the earlier stratum were found a few pieces of blue glazed pottery and the perforated marble shown as No. 7 in Fig. 16.

Trench No. C revealed but little worth mentioning. We found merely a small

No. F

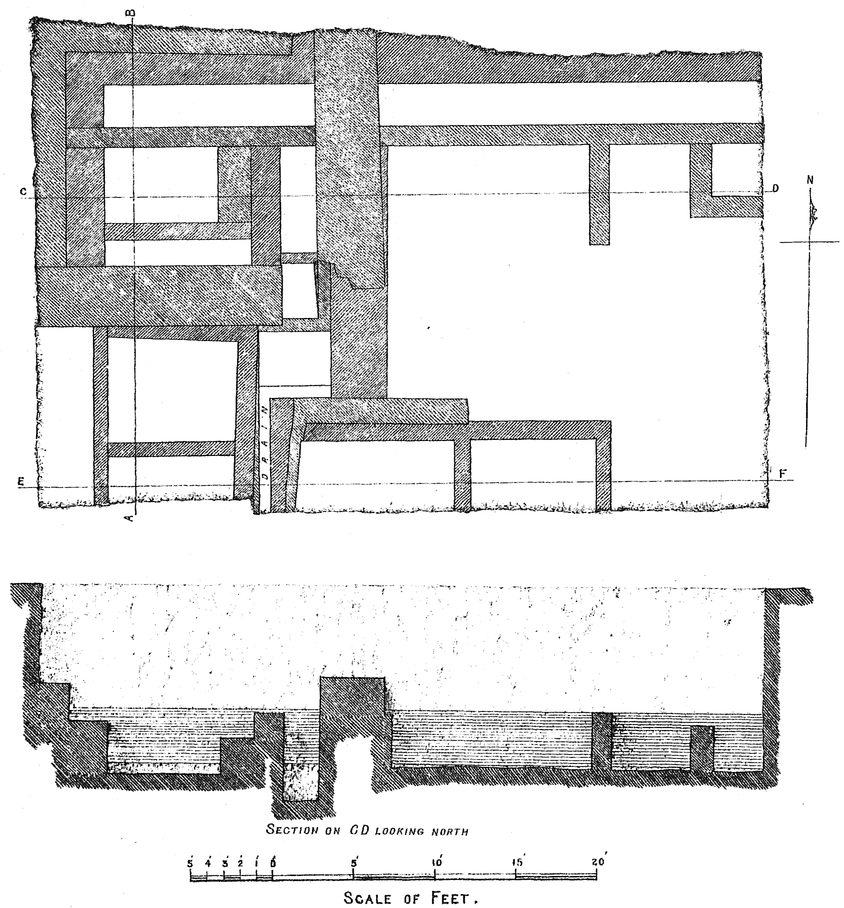


No. E

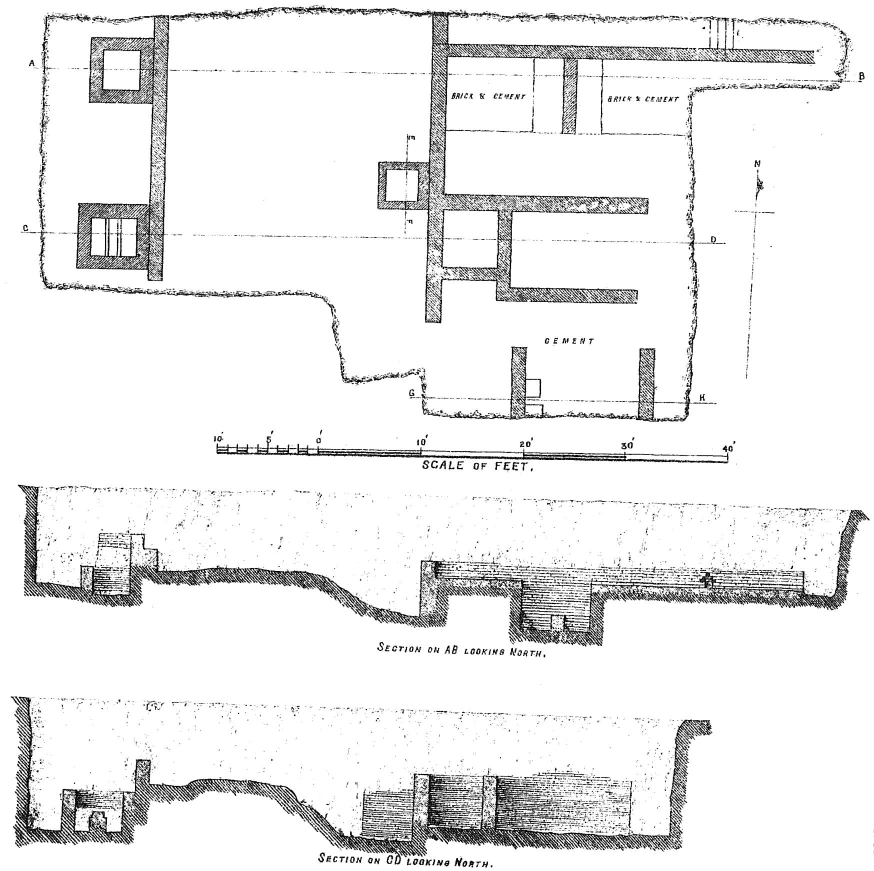


EXCAVATIONS AT BASARH.

No. G.



No. H.



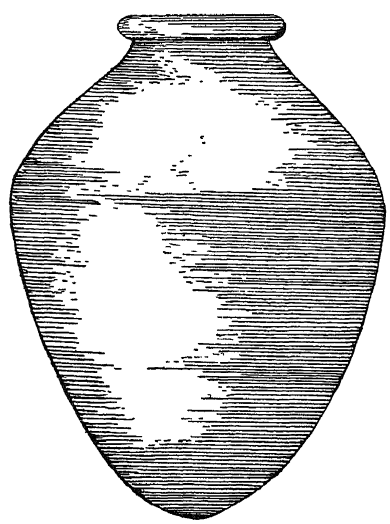
No. 1066, Dir., Archl. Survey, India.—Aug. 05—452.

Zinco., S. I. O., Calcutta.

EXCAVATIONS AT BASARH.

masonry chamber, 3 feet square, and open to the north, with a broken masonry wall joining it to the west.

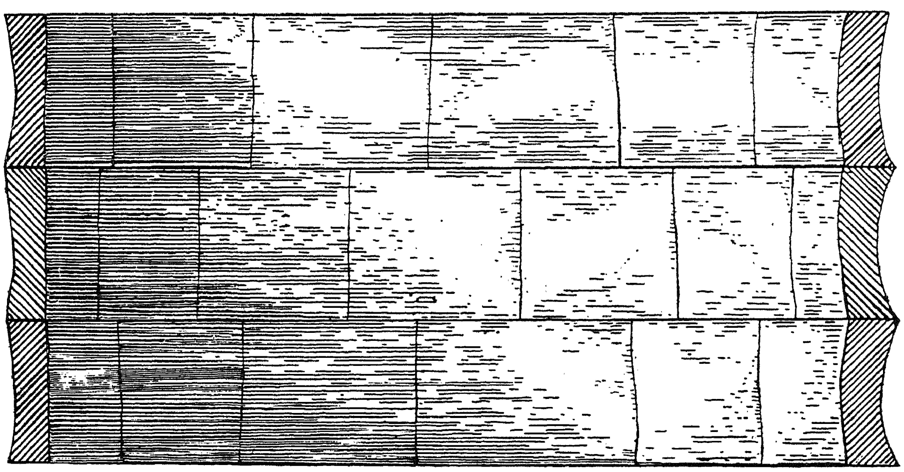
The fourth trench, D, was the largest excavation made by me. It was dug at the place where, according to native opinion, the palace of Rājā Bisāl stood, and revealed the most interesting find made during the excavations, a great number of inscribed clay seals of the time of the early Gupta kings (4th and 5th centuries, A.D.). The place, where this discovery was made is the square chamber in the western half of the trench, through which line C D runs in the plan on Plate XXXIII. It was partly covered by the cement pavement with remains of foundation walls of a later building, which had to be cut through in order to clear the room beneath. Plate XXXVI (*c*) shows the excavation before the cement floor of the upper room had been entirely destroyed. The position of the two coolies standing inside the trench marks the lower chamber, where the clay seals were lying. It is 10 feet square, and has a cement floor at a depth of 10 feet. Pottery and burnt wood were found mixed up with the seals. There was no opening in any of the walls, and the room evidently was a subterranean chamber used as a deposit of letters and other documents to which the seals were attached. The continuation of this trench revealed many remains of buildings both of earlier and later date, in a very tangled condition and difficult to discern. The square brick platform west of the room containing the seals and the two lines of walls north of it with a cement pavement are all of later date, as their depth was only a few feet below the surface. The remaining buildings in the western half of the trench generally belong to the earlier class, with the exception of the cement platform in the south. Here two large earthen jars were found standing about 3 feet deep, while other similar vessels, generally broken, stood at various places in the eastern half of the trench. One of those jars is shown in Fig. 3. They hardly differ from the big jars now in use. I doubt whether they are very old, as they stood so close to the surface. They contained merely earth and generally had been broken already before removing them. In the eastern half of the trench we have to the north a long line of wall running from east to west with a square room attached to it. These belong to the earlier set of remains. Parallel to the eastern side of the square chamber are seen three long lines of walls, the first of which is later while the second and third appear to be of the same date as the square chamber. Across these lines of walls lay a number of other walls, forming a set of square rooms. However, the remains here were so much mixed together, that in some cases I found it almost impossible to make out an accurate plan. It is possible that some of the masonry, which was found lying above the lower walls, but not apparently connected with them, may have belonged to the same buildings but fallen down during the ruin of the place. The small, square well, through which line M N passes in the plan, is 11 feet deep. The eastern half of the trench is shown on Plate XXXVI (*d*), and a plan of the trench is given on Plate XXXIII.



Scale One-twelfth.
Fig. 3: Earthen jar.

The remains found in trench E may be seen on Plate XXXVI (*b*), and in plan and section on Plate XXXIV. They consist of a single room, 7 feet square inside, with a line of wall running close to its northern, eastern and southern sides, but at a greater depth. Three broken walls branch off to the east, and near the south-eastern corner is a well, 4 feet square, and more than 11 feet deep. East of it are a few masonry steps leading up to the outer wall, while the south-western angle of a second wall joins the well near its north-western corner. As will be seen from the section on C D in Plate XXXIV, the eastern wall of the central rooms goes down to a greater depth than its western wall. The line of masonry running from north to south across the central room may have been built as a support for the cement pavement. Similar cross-walls have been found at various places and will be noted later on. Evidently the remains inside this trench belonged to one isolated group of buildings of the earlier period, for no continuation was found all around them, and the two fragments of walls shown in the plan near the northern and southern ends of the trench are of a later age and have no connection with the main building. Unfortunately, I found no indications as to what purpose this single building used to serve.

The most curious remains found in trench F were a set of three square masonry wells, adjoining each other. The two larger ones went down to a depth of 24 feet, when water was reached. Below the northern wall of one of them we found another circular well, composed of three rings of burnt clay, placed one above the other. It was half covered by the wall of the square well above. Its diameter is 2′ 6″ and the total height



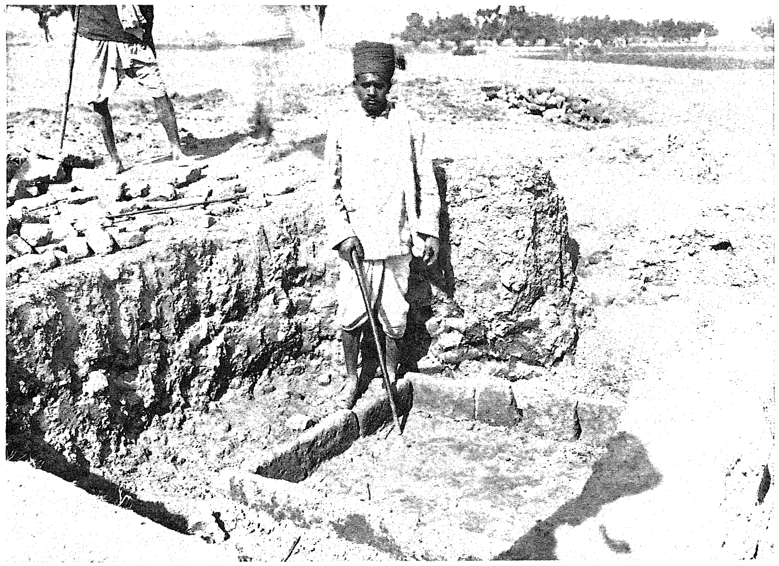
Scale One-sixth.

Fig. 4: Section of circular well.

of the three rings is 15 inches. All of them were broken and could only be removed in fragments, from which the restored drawing shown in Fig. 4 has been prepared. The position of the circular well is indicated in the plan on Plate XXXIV. It is marked by the circle on line A B. How these curious circles of burnt clay got down there, and for what purpose, is still a puzzle to me. Inside the second square well, near the eastern end of the trench, was found the ivory lamp stand shown on Plate XXXIX, 4. It must have fallen down by accident, when the place was still inhabited. The third and smallest well to the west has two holes in each of its eastern and western sides,

PLATE XXXVI.

a



b



c



d



Photogravure.

Survey of India Offices, Calcutta, April 1905.

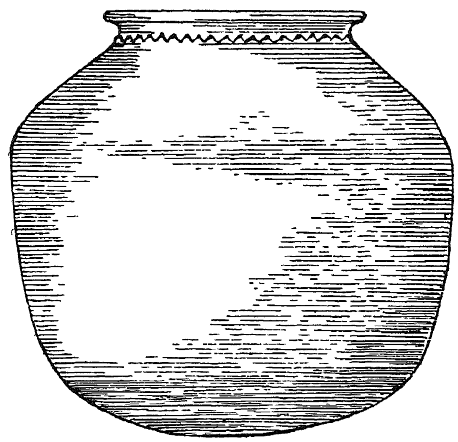
(a.) TRENCH B, WESTERN SIDE.

(b.) TRENCH E, FROM SOUTH.

(c.) ROOM WITH CLAY SEALS IN D.

(d.) TRENCH D, EASTERN SIDE.

which seem to have held two wooden beams laid across the well at about half its depth. South of the three square wells are the foundations of two rooms, 10 feet square each. They are shown in front of the photograph on Plate XXXVI (*a*). Each of them has a cross-wall, running east to west, evidently to support the pavement, of which no traces were found. North of the square wells runs a drain, about 15 feet long. This can be seen on Plate XXXVII (*b*). Then follow the walls of a large oblong room, evidently more than 20 feet in length. In its north-eastern corner appears to have been a door. The interior of this room and its eastern side were partly covered by a tangled mass of broken masonry, partly belonging to later buildings, the plan of which can be seen on Plate XXXIV. Adjoining the northern end of the eastern square well was a brick-platform, upon which stood the jar shown in Fig. 5. The drawing is a restoration, as the jar could only be taken out in fragments. The clay had become so brittle that it broke as soon as it was touched. The shape is somewhat peculiar and the glazing is of a fine chestnut brown colour. The interior was filled with earth only. It stood at a depth of 9 feet below the surface and evidently belongs to the earlier stratum, as all the main buildings in the eastern half of this trench, except perhaps some of the broken masonry in the north-eastern section. The western walls of the large oblong room north of the square wells and of the two square chambers to the south, though partly broken, are still seen to have formed one straight line. It evidently adjoined some open court, as no further traces of any remains were found to the west. The fragments of masonry buildings shown in the western half of the plan on Plate XXXIV all belong to a later date, as their depth was generally only a few feet below surface level.



Scale One-sixth.

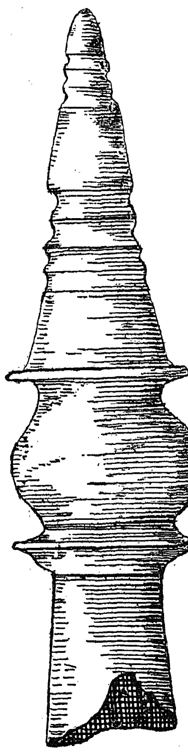
Fig. 5: Brown glazed jar.

The next trench G, which was dug in the south-western section of the fort, near the place where the modern temple stands, and which is illustrated on Plates XXXV and XXXVII (*b*), also represents a confused mixture of remains of masonry buildings. We found here a long wall to the north running across the trench from west to east, with a set of square chambers attached to its western end, and a small chamber, only partially disclosed, at its eastern end. Two other rooms were laid open near the southern side of the trench, but have not been followed up to the end. The square rooms near the south-western corner of the trench contained portions of a cement pavement. The thick lines of walls running from north to south and from west to east are generally formed by accumulations of fallen masonry partly coming from later superstructures.

The largest room traced during the excavations was found in the eastern half of trench H, which was dug a little north of trench G [see Plates XXXV and XXXVII (*d*)]. Its length must have exceeded 25 feet, and its breadth is 14 feet. The floor was made by a pavement of cement and concrete resting on a single layer of brick. This was supported by a cross wall running north to south, of which only the northern end has survived. North-east of this hall we found the opening of a drain. The

southern side of the hall was flanked by a small chamber, 6 feet square, which on the east was joined by an oblong room, the length of which could not be determined. To the west was a small well, 3 feet square and 12 feet deep. At a distance of 25 feet from the western wall of the big hall, and parallel to it, runs another line of masonry with two small square chambers attached to its western side.

It may be said that the buildings of which the foundations have been laid open during the excavations, consisting as they generally do of small chambers of a little over 10 feet in extension, are too insignificant to have formed part of a royal palace. It should, however, be borne in mind that only disconnected traces of a great variety of houses have been exhumed here and there, and that it will be necessary to open up systematically a much larger section of the fort, say one-fourth or one-third, before any general plan can be made. This indeed will be the programme of future operations at Basarh. Royal palaces probably consisted of the same irregular medley of buildings in the earlier Hindu days as in later times. If the fate of the palace of Vaiśālī should fall upon the fort, let us say, of Agra, an archæologist excavating its ruins would probably be surprised to find the glory of the Mughal citadel represented only by the foundation walls of a tangled mass of comparatively small and insignificant chambers. The conditions of royal life in the East spent during several months of the year in camp did not require stately halls and princely mansions according to Western ideas. The court was held in the open, where the king delivered justice and received his grandees. Further excavations at Basarh, if carried on systematically as indicated above, probably will lay open some large court, surrounded by small rooms, similar to the Dīwān-i-'Āmm in the Mughal forts. So much, however, is clear, that the buildings described in this chapter were all secular. No remains could be shown to have belonged to a temple or other place of religious worship. In fact, a small stone figure of Gaṇeśa was the only image of a deity found in the excavations.



Scale One-sixth.
Fig. 6: Pinnacle of roof (restored).

The walls of the houses did not merely consist of plain masonry, but in places had bands of carved bricks of simple patterns, of which five specimens are figured on Plate XXXVIII, Nos. 14 to 18. No. 13 of the same plate is a fragment of a round brick. The roof was formed by tiles, of which plenty were found among the *débris*. They differ from those now used in Bihar. There was a rim on each side near the edge, one above and one below, by which the bricks were joined together, and a hole near the top held the peg by which the tile was fastened to the bamboo frame of the roof. Two such tiles, one from the corner of the roof, are figured as Nos. 19 and 25 of Plate XXXVIII. I remember seeing a great number of similar tiles in the Lucknow Museum, which had been dug out somewhere in the United Provinces, I forget at which place. The top of the roof must have been crowned by pinnacles of which one has been restored in the woodcut of Fig. 6.[1]

[1] Mr. Cousens informs me that somewhat similar finials are still used in Sind, especially upon mosques and tombs. They are of burnt clay, like the Sind tiles, and are usually glazed and coloured. [Ed.]

EXCAVATIONS AT BASARH: TRENCHES EXCAVATED IN FORT.

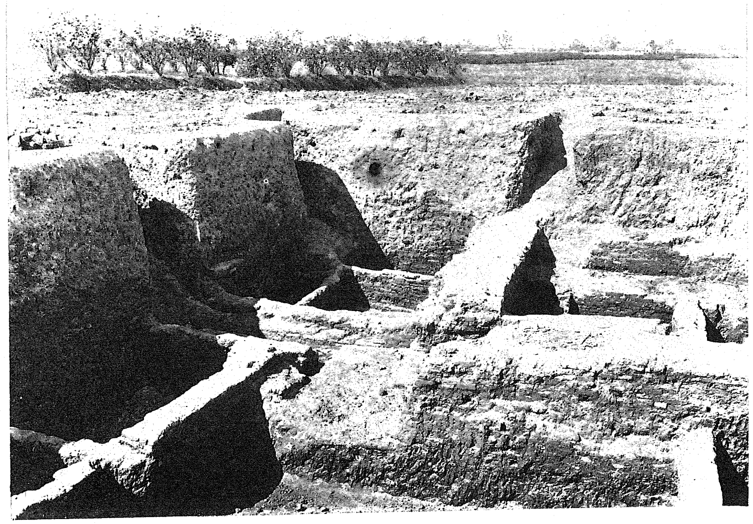
a



b



c



d



Photogravure.

Survey of India Offices, Calcutta, May 1905.

(a.) TRENCH F, FROM SOUTH.

(b.) TRENCH F, FROM WEST.

(c.) TRENCH G, FROM SOUTH.

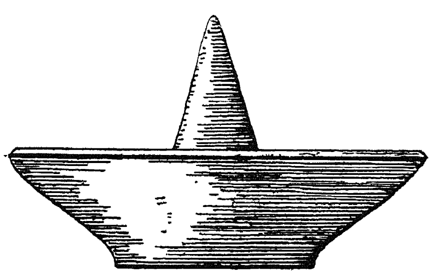
(d.) TRENCH H, FROM WEST.

No complete specimen was found, but a large number of fragments, from which the restoration could be made almost with certainty. The conical top rests on a sort of urn, shaped like an ordinary *kalaśa*. Inside it is hollow. It is made of burnt clay evidently turned on the wheel. The resemblance of the restored specimen in Fig. 6 to the pinnacles shown on ancient relief carvings of houses will be recognized at once. The absence of stones from the *dêbris* must be noticed. If stones had been used to any extent as building materials, such as lintels and jambs of doors, as has been done in ancient brick temples, we certainly should expect to find some remains of them. How far wood was used for the superstructures raised upon the masonry foundations cannot be determined. As the palace seems to have been sacked several times and partially destroyed by fire, no traces of wooden structures are likely to be found. The floors of the houses, consisting of cement pavings supported by walls laid across the foundations, have already been repeatedly noticed. The great number of small square masonry structures described as wells seems remarkable. From the great depth of their walls, I have been led to call them wells, but some of them also may have been used as store rooms.

Miscellaneous objects found in excavations.

Before entering into a detailed account of the inscribed clay seals, I propose to devote this chapter to a description of selected specimens of other antiquities, pottery, terracottas, beads, etc., found during the excavations. A complete list of all objects found will hardly be expected, and I have chosen only a number of objects representative of the whole collection. The majority of the finds were such as might be made in any ancient site in Northern India. Clay-balls of various sizes, spindle-whorls, pebbles, cowries and similar things, turned up in large numbers. Small terracotta figurines of animals, like those put down in modern days near holy shrines, were likewise numerous. Most of these objects seem to have served as children's playthings and thereafter been thrown away. Fragments of pottery turned up everywhere. Generally they consisted of broken bits only, and the number of complete specimens was comparatively few.

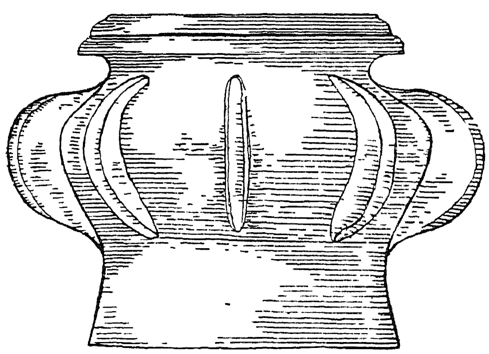
Plate XXXVIII shows three specimens of handles attached to earthen vessels. They are Nos. 1, 2 and 23, and measure 7¼, 4½ and 4¼ inches, respectively, in width. All of them are formed by engrooved semicircles of burnt clay. No. 5 is a straight handle, 4¾″ long, glazed in a red brown tint. No. 3 is a spout with a cylindrical hollow, 3¼″ wide at the bottom and 4¼″ long. Objects like that shown in Fig. 7 were exceedingly common. They are formed by a round saucer, shaped conically within. The interior of the round pyramid, which is of double the height of the lips of the saucer, is hollow. I do not know what particular use these objects were put to. Perhaps they served as lids of open-mouthed vessels.[1] No. 4 is somewhat similar to them. Around the central hollow runs a deep groove, and the edge of the lip



Half size.
Fig. 7.

[1] Similar lids were found in abundance in the excavations at Chārsada, in the Frontier Province, and also at Brāhmanābād, in Sind. [Ed.]

is turned over. The width is $4\frac{1}{4}''$ and its height $2''$. Nos. 8, 11 and 12 represent more or less common types, with rounded bases No. 8 has a deep groove around its rim and the lips are turned over. No. 12 has a small ornament like a string of beads at the bottom of its rim. This piece may also have been used as the lid of a vessel. The width of the three pieces varies between $5''$ and $6\frac{1}{2}''$. No. 10 is a well-preserved, neat little vessel, hollow inside, with a circular opening and three little hooks attached to its rim. The base is rounded. Its width is $3''$ and the height $1\frac{1}{2}''$. No. 22 belongs to a curious cylindrical vessel perforated by small holes like a sieve. It is $5\frac{1}{4}''$ long. Its exact purpose cannot be made out. Nos. 9, 21 and 24 are cups and jars differing very little from those now in use. They represent the most common type of pottery found. Their height is $4\frac{1}{2}''$, $9''$, and $7\frac{1}{2}''$, respectively. A specimen of a large-sized jar has already been represented in Fig 3. Another glazed jar of somewhat peculiar shape with an indented line around its top has likewise been shown in Fig. 5. No 6 is a small water vessel with a spout attached to it, like those now used by Muhammadans. It measures $3\frac{3}{4}''$ in height. No. 7 is a small lamp in no way different from the modern *cirāgh*. Hundreds of this kind turned up in the excavations. It is $2\frac{3}{4}''$ long and $1''$ wide. The curious object of which a restored drawing is shown in Fig. 8, probably was no vessel at all, but may have formed part of an ornamental pilaster or some other architectural feature.[1]



Scale One-third.

Fig. 8.

The two specimens of tiles shown as Nos. 19 and 25 on Plate XXXVIII, have already been referred to. The former measures $4\frac{1}{4}'' \times 6\frac{1}{2}''$. The latter, which comes from the corner of a roof, is $7\frac{1}{2}'' \times 7''$. The measurements of the six ornamental bricks on Plate XXXVIII are as follows:—

No. 13: $8'' \times 2\frac{1}{2}''$.	No. 16: $8\frac{1}{4}'' \times 2''$.
No. 14: $5\frac{1}{2}'' \times 2\frac{1}{2}''$.	No. 17: $8\frac{1}{4}'' \times 2\frac{3}{4}''$.
No. 15: $7\frac{1}{2}'' \times 2''$.	No. 18: $11'' \times 2''$.

Their ornamentation was comparatively simple and cut out with the chisel, not cast in a mould. This is the method employed for all brick ornamentation in India, of which the ruins at Gaur and Panduah have preserved the choicest and most elaborate specimens. The pattern of No. 14 is the most interesting. It consists of four square terraces raised one above the other and strikingly reminds one of the rows of similar terraces alternating with trees that run along the top of the coping stones in ancient Buddhist railings, such as the railing around the Bharhut Stūpa. No. 17 seems to have formed part of a line of crude tridents or trefoils, which perhaps may have belonged to a larger and more elaborate design made by alternating the position of several lines of this pattern. No. 18 projects in the shape of an obtuse angle, through which deep jags have been cut at regular intervals, alternating between a set with two pointed

[1] It seems very probable that, as Mr. Cousens suggests, this object formed the base of one of the pinnacles shown in Fig. 6. [Ed.]

EXCAVATIONS AT BASARH: MISCELLANEOUS OBJECTS.

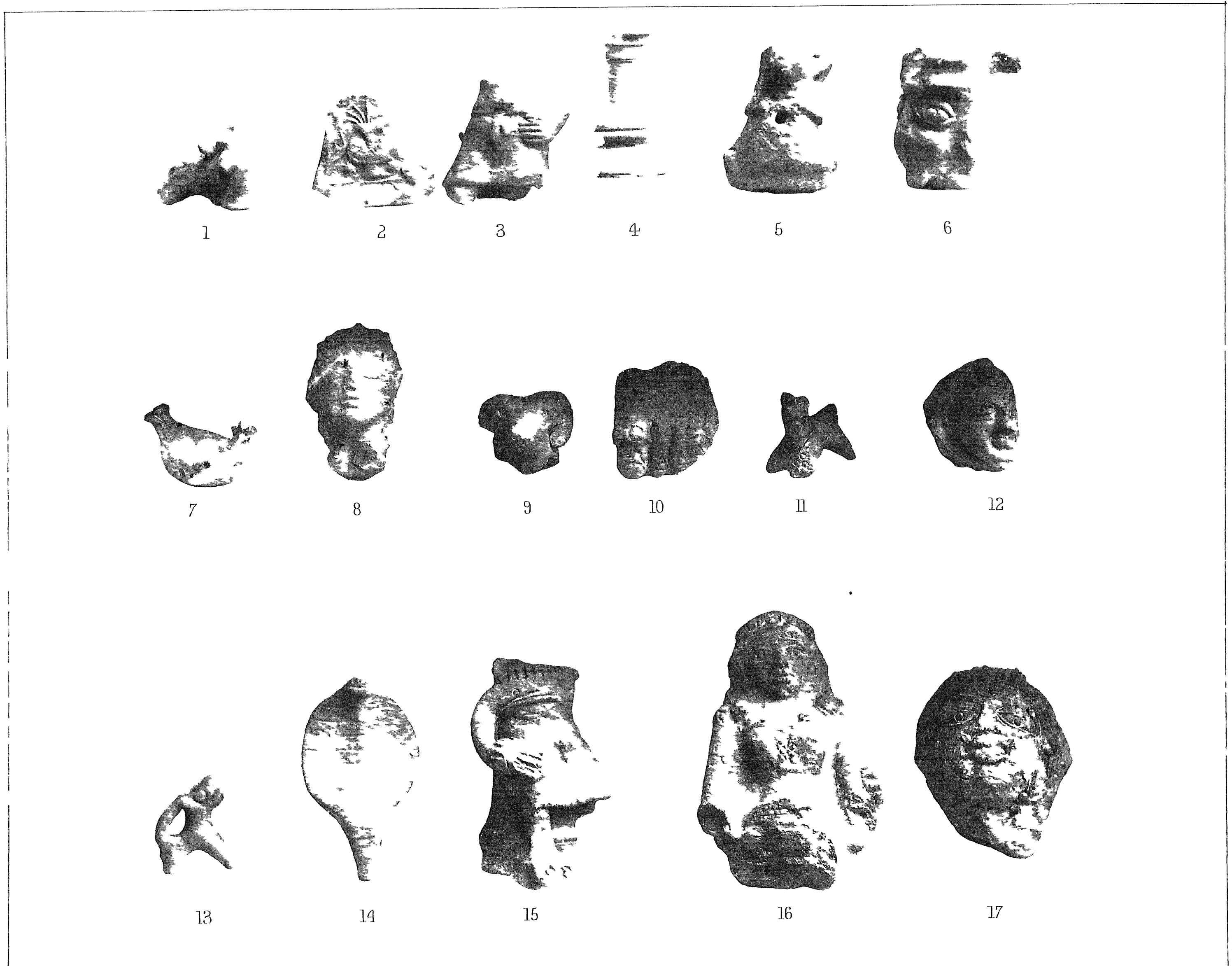


Photogravure.

Survey of India Offices, Calcutta, June 1905.

PLATE XXXIII.

EXCAVATIONS AT BASARH MISCELLANEOUS OBJECTS

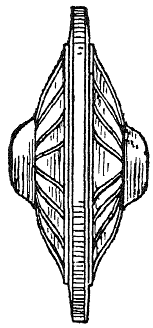


Photogravure

Survey of India Offices Calcutta April 1905

ends and another wedge-shaped one. Nos. 15 and 16 have alike been formed by sloping off sections of the edge of the brick at regular intervals, only in 16 the projecting face thus created has been marked with three deeply cut lines, making up a triangle with a vertical line running from its top to the base.

The number of terracotta figures found was very large. Most of these objects may have been used merely as playthings. Thus the wheel shown in Fig. 9, one specimen only of many, may have formed part of a small car like that with which we find Rohasena, the infant son of Cārudatta, playing in the Mṛcchakaṭikā. Among the childish sports with which young Pārvatí amuses herself in the beginning of Kālidāsa's Kumārasaṁbhava (I, 29) we find it mentioned that she makes balls (*kanduka*) and dolls (*kṛtrima-putrikā*) out of the clay of the banks of the Ganges, and the small clay bird (No. 7 of Plate XXXIX) reminds one of a similar figure with which we find young *Bharata*, the son of Śakuntalā, playing in the sixth act of Kālidāsa's drama. The head of a male figure (No. 17 of Plate XXXIX) with its twisted mustache bears a striking resemblance to some of the Bodhisattva heads among the Gandhāra sculptures. The influence of that school of sculptors very likely stretched as far as Bihar. The statue of Buddha, called Bodhisattva in the inscription of the year 64, which Cunningham found at Budh Gaya, is of the Mathura type, which exhibits many traces of affinity with the art of Gandhāra.[1] The hair of the male head (No. 6 in Plate XXXIX) is dressed in a peculiar way, but similar figures have been found elsewhere. The eyes are very large, and the technique is very inferior, as in most Indian terracottas. Measured by the standard of female beauty according to Indian notions, the lady (No. 16 of Plate XXXIX) can scarcely be called a representative of the fair sex, for her necklace falls down between her breasts, while in all the best sculptures the breasts are represented so close together that hardly a silk thread could pass through between them. It is possible that some of the terracotta figures were placed against the walls of the houses as ornaments, as their backs are flattened. The ivory lamp stand (No. 4 of Plate XXXIX) has already been referred to. It has a mortice hole in its top evidently for the reception of a metal lamp shaped like an ordinary *cirāgh*. It is nicely turned, but some parts of its surface have peeled off, and from having been inside a well for centuries, its surface has adopted a yellow tint with brown stripes in a marble-pattern. I showed it to Major Alcock and to Messrs. Burkill and Hooper of the Indian Museum, who all pronounced it to be of ivory. The following is a list of the terracottas, etc., shown on Plates XXXVIII and XXXIX:—



Half size.

Fig. 9 : Terracotta wheel.

Plate XXXVIII, 20. Left arm of male figure with part of breast; 7″ × 9″.

Plate XXXIX, 1. Broken figure of elephant; 3½″ × 2½″.

" 2. Portion of moulding, with *kalaśa*; 3½″ × 3¼″.

" 3. Fragment of human figure, belly and upper parts of legs, left hand resting on hip; 3½″ × 3½″.

" 4. Ivory lamp stand, with mortice hole in top; 2½″ × 4¾″.

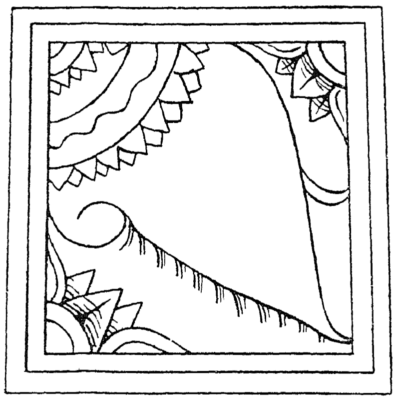
" 5. Head of ram, with two small holes in lower corners; 3¼″ × 4½″.

" 6. Head of male figure, pointed beard, hair projecting at back; 4¼″ × 3¾″.

[1] See Cunningham's *Mahābodhi*, Plate XXV The image is now in the Indian Museum.

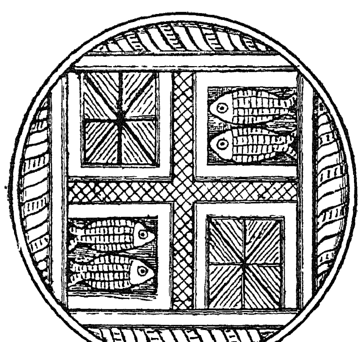
Plate XXXIX, 7. Clay bird, hollow inside, two holes for adding wings; 3¾″ × 2¼″.
" 8. Head of human figure, broken; 3″ × 4¾″.
" 9. Head of ram, broken; 2¾″ × 2¼″.
" 10. Fragment of left human foot, with ring on big toe; 3¼″ × 3¼″.
" 11. Small terracotta animal, crude and indistinct; 2½″ × 2½″.
" 12. Head of female, left side wanting; 2½″ × 3½″.
" 13. Crude figure of a dog; end of tail touches head; 2¾″ × 2½″.
" 14. Upper portion of cobra; 3½″ × 5¾″.
" 15. Broken human figure, right foot and belly; right hand resting on hip; 3¾″ × 6¾″.
" 16. Upper portion of female figure; 5½″ × 7¾″.
" 17. Head of male figure with twisted mustache; 4½″ × 5½″.

Stone tablets are illustrated by four specimens.[1] Of these the simplest is shown in Fig. 10. It has a shell placed diagonally inside a double square, the other two corners of which are filled up with a floral design. The next two round tablets shown in Figs. 11 and 12 represent one side each of two different specimens. Fig. 11 has a square laid inside the circle. This is again divided by a cross into four small squares, two of which have a pair of fishes, one of the many auspicious emblems in India, while the other two are shaped like the St. Andrew's cross. Fig. 12 has five lines of stripes somewhat resembling fern-leaves. These are encircled by an ornamental band, filled with a net made of small lines laid across each other. The fourth tablet, shown in full size in Fig 13, has a net of spirals alternating with six-petalled flowers. The drawing is a restoration, as the surface of the tablet was worn off in the centre, the stone evidently having been used for sharpening knives on. The ornamented side is a little rounded, the flat side being plain, with the exception of a few flowers cut into it. The arrangement of the spirals is such that each flower is surrounded by six of them, corresponding to its six petals.



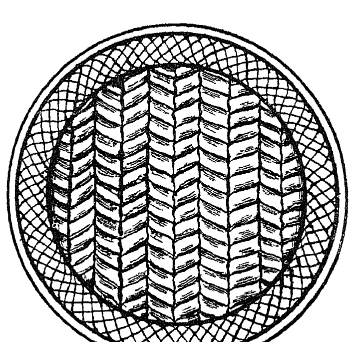
Half size.

Fig. 10: Stone tablet.



Half size.

Fig. 11:



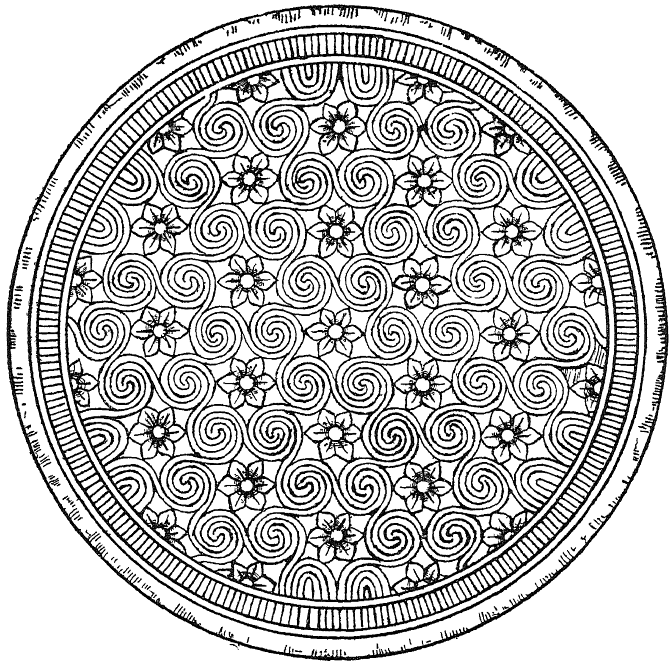
Half size.

Fig 12:

Stone tablets.

[1] Mr. Cousens finds a strong resemblance between these tablets and the *Daraninavamiśila,* which according to precept is laid deep below the foundations of a Hindu temple, immediately underneath the image. It is of stone, divided into nine squares, each of which has a symbol connected with water, and around it are eight smaller slabs also possessing symbols. [Ed.]

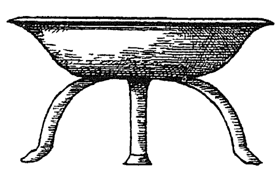
Around the central flower are three concentric circles of flowers, the first with six, and the second and third with twelve each. This gives a total of 31 flowers. Those of the third circle are half covered by the circle forming the inner margin. The number of spirals is $6 + 18 + 18 = 42$, to which must be added twelve half-spirals around the margin. The tablet is of considerable interest as an instance of the spiral ornament occurring in India. Its exact date is not known, but from its find-place it cannot be later than the Gupta time. An older specimen of the 3rd or 4th century B. C. is found on a round gold leaf deposited with the relics of Buddha in the Piprāhwā Stūpa. It is now in the Indian Museum. It consists of spirals only, without the flowers of the present tablet.



Full size.

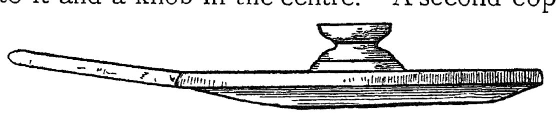
Fig. 13 : Stone tablet with spiral ornament.

Objects in metal, such as iron or copper, turned up in a badly corroded state generally, the damp soil of the place being singularly unfavourable to their preservation. The two objects represented in Figs. 14 and 15 are both of copper and were thickly covered with verdigris, when I found them. Both are shown in restoration, as particles of them were broken and missing. The first is a small tripod supporting a round bowl. The other is a circular dish with a handle attached to it and a knob in the centre. A second copper dish of similar shape was found close to it. The find-spot of these objects was in trench G at a depth of about 7 feet. The iron objects generally consisted of broken knives and other implements, but they had all so badly suffered from corrosion that none of them gave any proper idea of their original shape.



Half size.

Fig 14: Copper tripod, restored.



Half size.

Fig. 15 : Copper dish, restored.

A selection of beads and similar objects is shown in Fig. 16. Mr. E. Vredenburg, of the Geological Survey, has been good enough to examine them for me, and his notes, which I insert into this account, will be found of interest.

No. 2 : diam. $\frac{7}{8}''$, height $\frac{9}{16}''$. "Banded jasper from the 'Bijawar' formation. The Sone river traverses a large outcrop of this formation and carries along many pebbles of the jasper." [E. V.] Many specimens of this kind turned up. The colour is chestnut brown, with lighter bands.

Pebbles also of this stone were found in the *débris*. The round polished specimens must have been used either as weights or worn as ear-rings. This refers also to No. 7.

No. 7 : diam. 1½″, height ⅝″. Found in trench B at a depth of about 12 feet below surface. "Hornblendic diorite, specific gravity 3·00. Diorite usually contains less hornblende (the black material) and is not usually so heavy. This is probably a 'segregation' such as occurs scattered

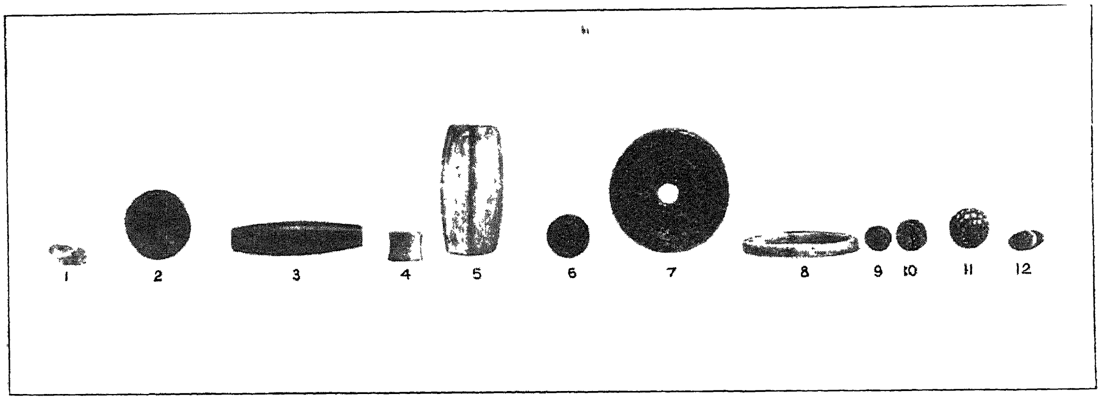
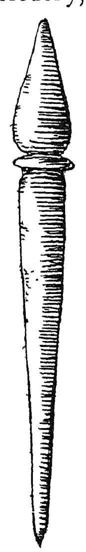


Fig. 16 : Beads and similar objects.

through the normal rock. Being harder than the main mass of the rock, they become detached and find their way into river beds in the shape of pebbles more readily than the normal rock. The Sone drains large areas of rocks of this kind." [E. V.] The colour is black and white. Around the central hollow are five concentric circular grooves on each side. The rim also is a little grooved. I should prefer to call this piece an ear-ornament, although the hole looks as if several pieces were strung together.

Nos. 3 and 6 : 1¾″ and ½″. "Agate. It is probably artificially darkened by processes similar to those used at Cambay, Broach and Ratanpur. The custom of artificially colouring agate is a very old one." [E. V.] Black colour. Both pieces perforated.

No. 10 : ⅜″. "Agate or translucent chalcedony. The name 'Agate' properly refers to banded chalcedony, but this probably came from a banded variety, the entire bead having been obtained from the thickness of one band." [E. V.] Pale, translucent colour ; perforated.



Half size.

Fig. 17 : Horn-pin.

No. 12 : ⅝″. Agate, perforated, bluish band.

No. 9 : ⅜″. Agate (pale cornelian), perforated, reddish colour.

Nos. 1 and 5 : ⅝″ and 1½″. Rock crystal. Both pieces have stringholes. Two sides of No. 1 flattened, and knob attached to each end around stringholes. No. 5 octagonal cylinder.

No. 11 : ½″. "Pale coloured cornelian (a variety of agate or chalcedony). The white spots have been produced artificially, probably by heating, though it is not possible to tell the exact method." [E. V.] Perforated, orange red, with white spots.

No. 4 : diam. ½″; height ⅜″. "Quartzose material probably from a white quartzitic band from an agate. The specific gravity is slightly lower than that of quartz of the same appearance. Hence it is probably chalcedonic and not true vein quartz." [E. V.] Hexagonal, rim slightly incurvated. Probably used as a dice.

No. 8 : diam. 1½″. Shell bangle, white colour.

Fig. 17 shows a horn-pin worn perhaps by females in their hair. It is of considerable size and has a pointed top.

As regards the place from where the stones described above come, Mr. Vredenburg suggests that they were taken from pebbles picked up in the bed of the Sone river. They are all derived from rocks drained by the Sone and its tributaries.

Inscribed clay seals.

The most interesting find made during the excavations consisted of a large number of pieces of clay, bearing impressions of seals. The total amounted to about 720 pieces with somewhat over 1,100 seal-impressions on them. Among these are approximately 120 varieties. Some seals occur very often, one (No. 29 in the following list) as many as 274 times. The place where this discovery was made has already been described above. The seals were found mixed up with fragments of pottery, burnt wood and rubbish inside a subterranean chamber, 10 feet square, in the north-western section of trench D. Evidently this room, which must have been closed over, and accessible only from above, served as a deposit for letters or similar documents, to which the seals had been attached, or it is also possible that it was used as a refuse chamber. A few seals, not more than ten, turned up here and there at different other places. They have been distinguished as such in the list.

From the shape of the clay pieces it is evident that they were attached to letters or other literary documents, and that they served to hold together the string which was tied around the wooden boards, upon which the letter was written, or which were used as a sort of envelope. In that case either birch-bark or palm-leaf took the place of our modern paper. Fig. 18 gives a view of the reverse of one of the clay lumps. The method adopted for sealing letters at this time seems to have been to press down the ends of the string tied round the boards into a piece of moist clay by means of some instrument, perhaps the broad side of a knife. Evidence of this is the groove which invariably occurs on the back of all the seals. Generally a few thin lines run across its centre. They must have been made by the blunt edge of the knife to press down the strings more deeply, in order to make them adhere tighter to the clay. The other side of the clay bears the impression of the sender's seal. In many cases traces remain of the finger-marks of the persons who handled the seals while moist; see, *e.g.*, No. 26 of Plate XLI. As the majority consisted of pieces of unbaked clay, it is clear that it was considered sufficient to allow the seal to dry during the transit of the letter. A few pieces are of a light yellow colour, and look as if the seal had been heated a little before despatching the letter. The present find thus distinguishes itself sharply from other collections of clay seals made at various ancient Indian sites, which as a rule consist of votive tablets, either put down as



Full size.

Fig. 18: Reverse of clay seal.

offerings near holy shrines or taken away as memorials by pilgrims The reverse of the latter is invariably quite smooth, and the groove and stringholes seen on all the Basarh seals are entirely wanting.

The date of the seals is roughly determined by the two specimens described as Nos 1 and 2 in the following list. There can be no doubt that the Mahādevī Dhruvasvāminī of No. 1 is the queen of Candragupta II, otherwise known to us as Dhruvadevī. A similar change of name is met with in the case of Murundadevī and Murundasvāminī, occurring in inscriptions of about the same time (see Fleet, *Gupta Inscriptions*, p. 132). Candragupta II ascended the throne about 380 A.D. and reigned up to 413, when his son, Kumāragupta, succeeded him. The Mahārāja Govindagupta mentioned in No. 1 apparently was a younger brother of Kumāragupta. It is tempting to identify him with Krsnagupta, the first in the list of the later Guptas of Magadha mentioned in the Aphsad inscription. The name Krsnagupta is found only in that inscription, which is in verse, and the choice of the word *Krsna* instead of its synonym *Govinda* may have been due to the metre. But although the difference in name is of little concern, the interval of some 275 years between the supposed time of Krsṇagupta and Ādityasena (675 A D.), the eighth in that line, is too large to have been filled up by eight generations only. A similar uncertainty is attached to seal No. 2. Ghaṭotkacagupta may be identical with the Mahārāja Ghatotkaca, the father of Candragupta I, who lived about 300 A.D. In that case the name given to him in the inscriptions would be an abbreviation, the second part of the name being left out just as his father's name, Gupta, evidently is merely the second portion of some compound meaning "protected by". The addition of *śrī* to the name in the seal certainly marks its bearer as a person of some distinction, while, on the other hand, the omission of the title *Mahārāja* borne by him in the inscriptions strikes one as somewhat peculiar. For this reason a final verdict cannot be pronounced, and the question is better left pending.

The palæographic evidence likewise points distinctly to the 4th and 5th centuries, or the time of the Imperial Gupta kings, as the date of the seals. The alphabet employed is throughout of the eastern variety of the Gupta type. The test letters, *la, sa,* and *ha* occur only in the forms peculiar to this script with the exception of one instance, *Yaksavatsa* (No. 18 and Plate XLI, 15). This seal, however, comes from a different find-place and does not form part of the main collection.[1] We know from the Maukhari inscriptions in the Barabar and Nagarjuni hill caves near Gaya, and from Mahānāman's inscription at Budh Gaya, that in the 6th century A.D. the western forms of these letters had come into use in North-Eastern India, and the year 500 A.D. therefore can be put down as the approximate *terminus ante quem* of the seals. There are a few more points connected with the palæography of the seal inscriptions that deserve to be mentioned. The sign of the vowel *ā* and the right-hand part of the diphthongs *o* and *au* very often exhibit a cursive form, consisting of a curve or hook attached to the bottom of the letter. See *gā* in *bhāndāgāra*, Plate XL, 7: *śā* in *śālibhadra*, Plate XLII, 34 (against usual form in XLI, 20); *go* in *gomisvāmi*, Plate XLI, 25 (but usual form in *gomundaka*, XLI, 26); *gau* in *gauridāsa* XLI, 28.

[1] For *la* see *Kulika* in Plate XLI, 20, 21, 28, and 33; for *sa* see *Visnu* in Plate XL, 3, and *raksati—raksita* in Plate XLI, 22; for *ha* see *Harisya*, *Harih*, and *Sārtthavāha* in Plate XLII, 36, 37, and 45.

EXCAVATIONS AT BASARH   INSCRIBED CLAY SEALS



1 2 3 4 5 6 7 8 9 10 11 12 13

Photogravure

Reduced to ⅘ Scale

Survey of India Offices Calcutta Apl. 1905

This cursive form of writing is not altogether new in the North-Eastern alphabet of the Gupta time. The common form of the initial *ā* (see *Āmrātakeśvara* of Plate XL, 2) is made by adding the sign of the long vowel in the shape of a hook to the initial short *a*. In Samudragupta's Allahabad pillar inscription (about 375 A.D.) we find long *ā* expressed by the same curve in *pratyarppaṇā*, l. 26, and in *parisarppaṇā*, l. 31, and an intermediate form, with the *mātrā* attached to the middle of the right-hand side of the letter occurs in the same inscription in *śāsana*, ll. 23 and 24, *Gāṅgam*, l. 31, *śobhā*, l. 15, *viṣṇugopa*, l. 19, and *go-śata*, l. 25. In a few seals *bha* looks almost like *ga*; see Plate XLII, 50; *jitaṁ bhagavatā*, and a somewhat stiffened form of this letter occurs in No. 33 of the list. The writing of the last seal is of about the same type as the Meherauli iron pillar inscription of Candra, presumably Candragupta I. (320 A.D.).

The inscriptions of the seals, as far as can be judged from short epigraphs of this kind, are in Sanskrit. A few instances, however, of the irregular genitive-termination, such as *Harisya* (No. 77) and *Prakāśanandısya* (No. 98), show that even in the time of the Gupta kings, when Sanskrit had been adopted throughout for official purposes, the mixed language of preceding ages had not quite died away. The form *ruṣideva* for *ṛṣideva* in 46 points to a pronunciation of the *r*-vowel that seems to have been peculiar to the South of India, while the lingual of *dhaṇasya* in 73 curiously reminds one of the orthography of the literary Prākrits. The spelling *Nāgasiṅha* in 94 instead of *Nāgasiṁha*, is only too common in inscriptions of this and later times. Evidently a distinct guttural sound had already been developed between the nasal vowel and the *h*, as in the modern word *Singh*.

The loss of the letters to which these seals had been attached is the more deplorable, as from similar finds elsewhere we may surmise what an enormous mass of light these documents might have thrown on private and official life in India, 1500 years ago. In their short inscriptions they give us nothing more than the names or titles of the persons who corresponded with the royal family of Vaiśālī in the 4th and 5th centuries. From these the pen of a novelist might easily draw a picture full of life and action. But an archæologist, even if Melpomene has smiled upon his cradle, has to abstain from fiction and to record dry facts only.

Among the titles of officials the most numerous is that of the *Kumārāmāty-ādhikaraṇa*. The last word must have been used in the meaning of "chief" or "superintendent," for in the seal No. 12 of the list the title *balādhikaraṇa* cannot be anything else but a synonym of the well-known and often used title *balādhikṛta* or "chief of military forces." In addition to his title, the "Chief of Princes' Ministers" is styled *Yuvarāja-pādīya* or *Yuvarāja-bhaṭṭāraka-pādīya*. The last word I have taken as synonymous with *pādāḥ*, a mere honorific term, and translated it by "His Highness." The addition of the word *Yuvarāja* to the title of various classes of officials shows that its use was not restricted to the heir-apparent to the throne. Of other officials we meet a chief of military forces (12), a chief of the treasury of the war office (13), a chief of the Police (14 and 15), a great chamberlain, Vinayaśūra by name, who is besides styled *taravara*, perhaps an office similar to that of the *tarika* of the inscriptions (16), a judge called Agnigupta (17), a chief of *uparikas*, in Tīrabhukti (20), and a chief of Princes' Ministers, at Tīra (22 and 23). Yakṣavatsa of 18, who is

styled *Bhaṭa* and *Aśvapati*, seems to have been another official. Seal 21 looks as if it came from an officer whose functions were similar to those of Aśoka's *Dharma-mahāmātras* (*vinaya-sthiti-sthāpak-ādhikaraṇa*). His jurisdiction was restricted to Tīrabhukti. The " Chief of the Government (*adhiṣṭhāna*) of Vaiśālī " in 25 may have been a sort of City Magistrate. According to Buddhist tradition, the city of Vaiśālī was ruled over by a Magistrate, who was elected by the people. Seal 19, beginning with *Prayuktaka* also may have belonged to some sort of official.

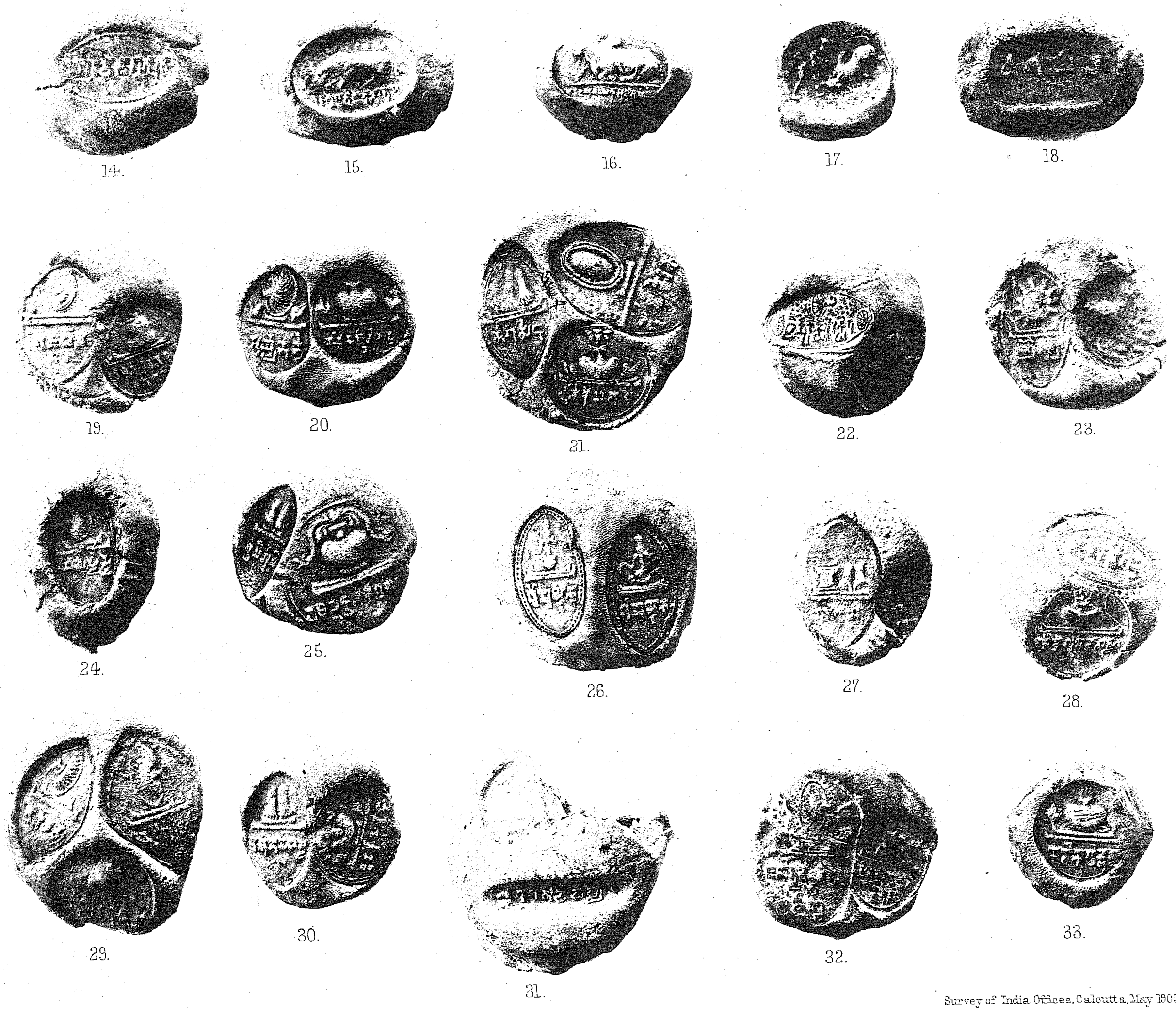
Of geographical names we find besides the well-known word Tīrabhukti (20 and 21) the simple Tīra, evidently the locality from which the term *Tīrabhukti* or " the district of Tīra " has been derived (see 22 and 23). The place cannot now be identified. Udanakūpa in 24 seems to be the name of another unidentified locality, where a committee (*pariṣad*) resided, the exact functions of which are not described. Vaiśālī is found on seals 25 to 27, the last, however, being uncertain. The inscription on seal 30 carries us further west to Benares. The letter to which it was attached must have been sent by the custodians of the temple of Āmrātakeśvara, one of the eight principal *liṅgas* at Benares according to the Matsya Purāṇa.[1] From inquiries made both in Calcutta and Benares, I find that the temple no longer exists. I feel inclined to explain the following seal No. 31 in a similar way. Its inscription I translate as " Nārāyaṇa, the Lord of the illustrious Viṣṇupada." This looks as if the seal came from the authorities of a temple of Viṣṇupada, perhaps the famous shrine at Gaya. If I am right, the seal would prove the existence of this temple in the 4th century A.D.

The most numerous among the seal inscriptions is that referring to the corporation or guild (*nigama*) of bankers (*śresṭhin*), traders (*sārtthavāha*), and merchants (*kulika*), No. 29. It is invariably combined with other seals giving the names of private individuals; only in one instance it is found together with the seal of the Chief of Princes' Ministers. The list of private names is fairly conspicuous, Nos. 42 to 120. A great many of them are distinguished as merchants (*kulika*). One person, Hari by name, styles himself both *kulika* (76 and 77) and *prathama-kulika* (99). Two persons are called bankers (*śresṭhin*, 109 and 110), and one, Doḍḍa by name, was a *sārtthavāha* or trader. Generally two or even more of the seals of private individuals are found in combination with each other or with the seal of the guild of bankers, etc., of which evidently most of them were members. It looks as if during those days something like a modern chamber of commerce existed in Upper India at some big trading centre, perhaps at Pāṭaliputra. Unfortunately the number of inscriptions of the 4th and 5th centuries in Northern India is not very large, and we cannot therefore expect to meet many of the names of the seals in other epigraphical records. It is, however, possible that Mātṛdāsa of No. 92 is identical with the person of the same name mentioned in the mutilated Gadhwa inscription of the time of Candragupta II, dated in the Gupta year 88 (A.D. 398-9; Fleet, p. 38). However this may be, there can be no doubt that most of the persons to whom the seals belonged carried on business transactions with the royal family of Vaiśālī. A very peculiar name is that of

[1] See Matsya Purāṇa, ed. Pañcānana Tarkaratna, Calcutta, Baṅgabāsī Press, Śakābdāḥ 1812, p. 298, Adhyāya 181, 28-30, and Aufrecht, Cat. Oxoniensis, 42a, 168. Another temple of Āmrātakeśvara now exists in Ramsa Mauza at Gauhati in Assam; No. 40 in *List of Archæological remains in the province of Assam.*

PLATE XLI.

EXCAVATIONS AT BASARH: INSCRIBED CLAY SEALS.



14. 15. 16. 17. 18.

19. 20. 21. 22. 23.

24. 25. 26. 27. 28.

29. 30. 31. 32. 33.

Photogravure.

Survey of India Offices, Calcutta, May 1905

Reduced to $\frac{5}{6}$ Scale.

seal 55, if I am right in explaining the words *Dharmmo-rakṣati-rakṣita* as a proper name. If taken as a sort of benedictory formula, they do not convey any sense to me; for what does it mean that "Dharma protects a protected person?" The seal occurs in combination with that of the guild of bankers, traders, and merchants, which shows that the person who used it was a member of that guild. On a number of seals, however, we find clearly no names but mere benedictory formulas. These are given in Nos. 32 to 41. They occur combined with seals of private individuals and those of the mercantile guild. Some of those inscriptions contain nothing but the simple word *namaḥ* "adoration" or *namas-tasmai* "adoration to him."[1] Others mean "victorious is the Lord," while Śiva is mentioned as Paśupati in one seal (39) and as Ananta on two (32 and 37), combined with his divine consort, called Ambā once, and Nandeśvarī in the other inscription. A few seals lastly (121 *sqq.*) contain nothing but a single letter, such as *ka* or *la*, or bear no inscriptions at all.

Turning now to the emblems on the seals, the first thing that strikes one is the total absence of any distinct symbol of Buddhism. The impression of a pair of human feet, which occurs very often (see, *e.g.*, Plate XLI, 21), need not necessarily mean a *Buddha-pada*, but may just as well be taken as a *Viṣṇupada*, or as the *pādukas* of some Jaina tīrthaṁkara, now a very favourite object of worship in the Jaina sanctuaries of north-eastern India. What I explain as an ornamented figure of a wheel (see Plate XLI, 20) certainly looks quite different from the usual Buddhist form of a *dharmacakra*, and, besides, the worship of the wheel never has been a monopoly of the Buddhists. The evidence of the emblems on the seals, so far as they have any connection with religious worship, together with the names occurring in the inscriptions and the seals bearing benedictory formulas, rather lead me to conclude that most of the persons to whom the seals belonged were followers of the Brahminical creed or Jainas, not Buddhists. The emblems do not exhibit a great variety of types. Two human feet (*pādukas*) and a flower pot (*kalaśa*) are the commonest among them; likewise another symbol, for which I have chosen the word "ornamented wheel," though I am by no means certain in regard to this name. I have not, however, been able to think of any other object more like it. Its general shape is illustrated in Plate XLI, Nos. 19, 20, 22, 24, 29, 32, and Plate XLII, 40 and 50. A distinct figure of a wheel seen from the front is illustrated in Plate XLII, 39. To the *kalaśa* and the wheel often a pair of conches (*śaṅkhas*) is added, a well-known auspicious symbol in India. A further uncertainty is connected with the central symbol of the seal shown on Plate XL, 3, which is similar to that of Plate XLII, 48. Both remind one of the symbol figured in front of Khāravela's Hathigumpha inscription,[2] which occurs also in connection with several other ancient inscriptions where it has generally been called "an ornamented *triśūla*." I have adopted this description, without, however, pretending to have found the true name of the symbol. The symbol, which is added to the mercantile guild's seal, has been described by me as a money-chest. This is nothing but a guess, to which I was led by the observation that in shape it resembles

[1] Similar expressions are found in the opening of later inscriptions. Thus the inscription of the Vikrama year 1688 from the Kathautiya gate at Rohtāsgarh (Kielhorn, List No. 318) begins with the words *Namas tasyai* "adoration to her."

[2] *See* Actes du sixième Congrès International des Orientalistes, III, 2, p. 137.

the objects held by some of the attendants of Lakṣmī on the seals of the officials (see Plate XL, 11 and 13, and Plate XLII, 46). From their dwarfish, thick-bellied stature it seems as if these attendants represent Kubera, the god of riches, and their attitude on seal 11 certainly looks as if they hold a money bag in front, from which they throw down coins. The shape of those supposed money bags closely resembles the object figured on the guild's seal. The symbol for sun and moon occurs either alone (Plate XL, 6) or in combination with other symbols (Plates XL, 3, and XLI, 15). Of animal figures we find a bull on Plates XLI, 16, and XLII, 41; a boar, probably the boar incarnation of Viṣṇu, on Plate XLI, 15; and a lion on the seal of Dhruvasvāminī (Plate XL, 1). The figure of a man holding down a bull by its horns in Plate XLI, 17, looks like an adoption of some classical design. The man seems to have a tail. Could he be a Satyr? A flag-staff is the symbol on some seals, like Plate XLI, 26. The shape of a *vedi* or altar is illustrated by the pedestal upon which the bull in Plate XLII, 41, stands. A curious symbol is the Persian fire-altar represented alone on Plate XL, 9, and in combination with a pair of human feet in Plate XLI, 27. It is evidently an adoption of the design occurring on the Kuṣaṇa coins. The figure of *liṅga* with *yoni* on Plate XL, 2, is perhaps the oldest representation of the phallic emblem that has as yet been found in India. The seals of officials generally have a figure of Lakṣmī with elephants pouring water over her (see Plate XL, 7, 8, 10, 11, and 13). This well-known type, which occurs in the oldest sculptures in India, calls for no further remark. But it may be mentioned that it is found on the seal of a copper-plate of Dharmāditya, whom Dr. Hoernle supposes to be identical with Samudragupta; this plate turned up some time ago in the Faridpur district of Eastern Bengal.[1] As regards the attendants, I have already stated that I believe them to be figures of Kubera, throwing down coins or pouring them out of round pots (Plate XL, 7 and 8). The combination of Lakṣmī and Kubera, however, is not known to me to occur anywhere else in Indian art, and my theory should therefore only be regarded as hypothetical.

The following descriptive list gives the results of a prolonged study of all the seal inscriptions. I do not think that many of them have been left undeciphered. Where I have left blanks, the letters were either entirely gone or too faint to read, and no more than one or two specimens having been found, they could not be used to complement each other's defects, as in the case of other seals, where the specimens were more numerous. Wherever the facsimile plate shows but faint traces of writing on the seal, while my list gives all the letters without a query such as in Plate XLI, 27: *guravasya*, it should be remembered that I had other specimens to help me The arrangement of the list will, I hope, enable those readers who do not care for details, to see at a glance what the seals contain. As the combination of several seals on one piece of clay forms such a striking feature of the collection, I have added to each seal the inscriptions of those with which it is found combined, the bracketed figure giving the number of specimens on which each combination occurs. In the descriptive account I have selected the Sanskrit words *kalaśa*, *pāduka*, *śaṅkha*, *triśūla*, and *vedi* for "urn, human feet, conch, trident, and pedestal."

[1] See *Indian Antiquary*, XXI, 45. I understand that Professor Kielhorn is bringing out an edition of this plate.

Seals of Dhruvasvāminī and Ghaṭotkacagupta.

(1) Oval area, single border line, $2\frac{1}{2}'' \times 1\frac{3}{4}''$. Seated lion facing right, horizontal line, below :—

(1) Mahārājādhirāja-śrī-*Candragupta*-

(2) patnī mahārāja-śrī-*Govindagupta*-

(3) mātā mahādevī śrī-*Dhru*-

(4) *vasvāminī.*

"The great queen, the illustrious *Dhruvasvāminī*, the wife of the Mahārājādhirāja, the illustrious *Candragupta*, the mother of the Mahārāja, the illustrious *Govinda-gupta*."

See Plate XL, 1.—3 specimens, 2 broken and very indistinct. This is *Dhruvadevī* of the inscriptions, the queen of Candragupta II (about 380 to 413 A.D.) For the change in the name *cf. Murundadevī* and *Muruṇḍasvāminī*, See Fleet, p. 132.

(2) Oval area, single border line, $1\frac{1}{8}'' \times \frac{3}{4}''$.

Śrī-*Ghaṭotkacaguptasya.*

"(*Seal*) of the illustrious *Ghaṭotkacagupta*."

See Plate XLI, 14.—1 specimen. Perhaps identical with the Mahārāja Ghaṭotkaca, the father of Candragupta I. (300 A.D.)

Seals of officials, guilds, corporations, etc.

(3) Circular area, single border line, diam. $2\frac{1}{4}''$. Lakṣmī standing in group of trees with elephants pouring water over her. Two dwarfish attendants holding objects like money bags. Horizontal line, below :—

Kumārāmātyādhikaraṇasya.

"(*Seal*) of the Chief of Princes' Ministers."[1]

3 specimens.

(4) Circular area, single border line, diameter $1\frac{3}{4}''$. Lakṣmī with elephants, no attendants. Horizontal line, below :—

(1) Yuvarāja-pādīya-kumārā-

(2) māty-ādhikaraṇa.

"His Highness the Yuvarāja, the Chief of Princes' Ministers."

See Plate XL, 10.—28 specimens.

(5) Same inscription as in 4. Circular area, single border line, diam. $2\frac{1}{4}''$. Laksmī with elephants. Her left hand holds the stalk of a six-petalled flower. The two dwarfish attendants pour out small objects from round pots.

9 specimens, one combined with *Śreṣṭhi-sārtthavāha-kulika-nigama.*

(6) Circular area, indented border line, diam. $2\frac{1}{4}''$ to $2\frac{3}{4}''$ (size of specimens varying). Lakṣmī with elephants standing on flowers, kneeling male on each side with a knob on his head. Money bag in front, from which he throws down small round objects (coins?). Two horizontal lines, below :—

(1) Śrī-Yuvarāja-bhaṭṭāraka-pādīya-

(2) kumārāmāty-ādhikaraṇasya.

"(*Seal*) of His Highness, the illustrious Yuvarāja (*and*) Bhaṭṭāraka, the Chief of Princes' Ministers."

See Plate XL, 11.—12 specimens.

(7) Same inscription as in 6, but broken and somewhat differently arranged. Only half of seal, 2″ diam. Emblems similar to preceding seal.

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[1] Dr. Vogel suggests the meaning of "office" for *adhikaraṇa;* he also takes *Yuvarāja-pādīya-kumārāmātya* as a *tatpuruṣa* compound, in which the first member takes the place of the genitive case, and translates : "The minister of His Highness the Yuvarāja (heir-apparent)." [Ed.]

(8) Circular area, single border line, diam. 2″. Lakṣmī with elephants, no attendants. Two horizontal lines, below :—

(1) Śrī-para[mabhaṭṭāraka]-pādīya-ku-

(2) mārāmāty-ádhikaraṇa.

" His Highness, the illustrious Paramabhaṭṭāraka, the Chief of Princes' Ministers."

1 specimen.

(9) Circular area, single border line, diam. 2¼″. Lakṣmī with elephants. Her left hand holds a flower. Two attendants with money bags. Three horizontal lines. Inscription indistinct, but probably identical with No. 4.

1 specimen.

(10) 27 specimens showing only indistinct traces of Lakṣmī with elephants and belonging to the types of Nos. 3 to 9, but broken. Inscriptions illegible.

(11) Circular area, diam. 2″. Lakṣmī with elephants. Two money bags, no attendants. From mouth of bags pours forth a line of small dots (indistinct). Horizontal line, below :—

(1) Yuvarāja-bhaṭṭāraka-pādīya- . . . . . .

(2) k-ādhikaraṇasya.

" (*Seal*) of His Highness the Yuvarāja (*and*) Bhaṭṭāraka, the chief of . . . ."

1 specimen.

(12) Circular area, indented border line, diam. 2″. *Kalaśa* with *śrī* to right and *śankha* to left. Two horizontal lines, below :—

(1) Yuvarāja-bhaṭṭāraka-

(2) pādīya-bal-ādhi-

(3) karaṇasya.

" (*Seal*) of His Highness the Yuvarāja (*and*) Bhaṭṭāraka, the chief of Military forces."

See Plate XL, 5. 1 specimen. The word *śrī* to right of *kalaśa* may also be taken as part of the legend.

(13) Circular area, diam. 1¾″. Lakṣmī with elephants. Holds stalk of flower in left hand. Two attendants pouring out indistinct object from round pots. Horizontal lines, one small and one large, below :—

[Śrī]-raṇa-bhāṇḍāgār-ādhikaraṇasya.

" (*Seal*) of the illustrious chief of the treasury of the war office (?)."

See Plate XL, 7. 3 specimens. *Ā-mātrā* of letter *gā* in shape of curve at right-hand bottom. The first words of the legend are doubtful.

(14) Broken seal 1½″ × 1¾″. Standing figure holding staff in left hand, head broken. Small and large horizontal lines, below :—

[Dā]ṇḍapāś-ādhikaraṇa[sya].

" (*Seal*) of the Chief of Police."

1 specimen. *Ā-mātrā* of *śā* in shape of curve added to right-hand side of bottom of letter.

(15) Same inscription occurs probably on another broken fragment, showing lower half of standing figure, and eight-rayed star ; 1½″ × 1½″.

1 specimen.

(16) Pointed oval, single border line, 1½″ × 1″. Symbols of sun and moon. Two horizontal lines, below :—

(1) Mahāpratīhāra-tarava-

(2) ra-*Vinayaśūrasya.*

" (*Seal*) of *Vinayaśūra*, the great chamberlain and *Taravara* (?)."

See Plate XL, 6. 1 specimen. *Taravara* may be a synonym of *Tarika*, a class of officials mentioned in copper-plates.

(17) Oval area, $1\frac{1}{8}'' \times \frac{3}{4}''$. Humped bull couchant. Horizontal line, below :—

Mahādaṇḍanāyaka-*Agniguptasya.*

" (*Seal*) of the Judge *Agnigupta.*"

See Plate XLI, 16. 1 specimen. From separate find-place.

(18) Oval area, $1\frac{1}{8}'' \times \frac{7}{8}''$. Boar, *śankha* on each side, above symbols of sun and moon. Below :—

Bhaṭ-āśvapati-*Yakṣavatsasya* (?).

" (*Seal*) of the Lord, the *Aśvapati Yakṣavatsa* (?)."

See Plate XLI, 15. 1 specimen. From separate find-place. Legend doubtful. Note later form of *ṣa* in *Yakṣa-*

(19) Oval area, $1'' \times \frac{7}{8}''$. Man with tail (?) holding down bull by its horns. Below :—

Prayuktaka....................(?)

See Plate XLI, 17. 1 specimen. From separate find-place. The inscription is very faint. *Prayuktaka* may be a title of officials like the similar term *Viniyuktaka* occurring in copper-plates.

(20) Circular area, single border line, diam. $2\frac{1}{8}''$.

Lakṣmī with elephants. Her left hand holds stalk of eight-petalled flower. Two dwarfs pour out small objects represented by dots from round pots. Small and large horizontal lines; below :—

Tīrabhukty-uparik-ādhikaraṇasya.

" (*Seal*) of Chief of *Uparikas* of Tīrabhukti (the district of Tīra).

See Plate XL, 8. 2 specimens. *Uparika* means a class of officials, whose exact functions are not known.

(21) Circular area, single border line, diam. $2\frac{1}{2}''$. Lakṣmī with elephants. Her left hand holds flower. Two dwarfs, holding money bags in front. Horizontal line; below :—

(1) Tīrabhuktau Vinaya-sthiti-sthāpa[k]-ā-

(2) dhikaraṇa[sya].

" (*Seal*) of the Chief of (?) . . . . in Tīrabhukti."

See Plate XL, 13. 1 specimen. The term *Vinaya-sthiti-sthāpaka* may denote a class of officials entrusted with the superintendence of the moral conduct of the people, like Aśoka's *Dhaṁma-mahāmātas.*

(22) Circular area, diam. $2\frac{3}{4}''$. Lakṣmī with elephants. Her left hand holds stalk of seven-petalled flower. Two dwarfs, half kneeling, throwing down coins (? round dots); top of head with knot. Horizontal line, below :—

Tīra-kumārāmāty-ādhikaraṇa[sya].

" (*Seal*) of the Chief of Princes' Ministers at Tīra."

6 specimens.

(23) Same inscription, but indistinct. Attendants represented standing or in profile. They pour out small objects from a pot, and on one specimen is a large flower between central figure of Lakṣmī and each of them.

2 specimens.

(24) Circular area, diam. $1\frac{3}{4}''$. Human figure seated in Indian fashion. Raised left hand holds branch of tree (?); right hand over knee holds indistinct object. Two horizontal lines below :—

Udanakūpe pari[ṣadaḥ].

" (*Seal*) of the Committee (*pañcāyat*) at Udanakūpa (?) "

See Plate XL, 12. 3 specimens, two very indistinct.

(25) Circular area, single border line, diam. 1". Hemispherical object, perhaps money-chest. Small and large horizontal lines, ends turned upwards; below :—

[V]aiśāly-adhiṣṭhān-ādhikaraṇa.

"The chief of the Government of Vaiśālī (City Magistrate ?)".

2 specimens, combined with indistinct seal, perhaps Prakāśanandi; adhiṣṭhāna "government" in Rudradāman's inscription, *Ep. Ind.* VIII, p. 46, note 7.

(26) Circular area, single border line, diam. $1\frac{7}{8}''$. Female standing in flower group, two attendants. Two horizontal lines, below :—

(1) [Vai]śālyām-araprakṛti-[ku]-

(2) ṭumbinā[m*].

"(*Seal*) of the householders of . . . . . . at Vaiśālī'.'

See Plate XL, 4. 1 specimen. Legend doubtful.

(27) Oval area, $1\frac{3}{4}'' \times 1\frac{1}{2}''$. Wheel with symbols for sun and moon. Two horizontal lines, ends turned upwards; below :—

[Vai]śāla-viṣay-ā . . . .

" . . . . of the district of Vaiśālī (?)."

See Plate XLII, 49. 1 specimen. Legend exceedingly doubtful.

(28) Circular area, single border line, diam. 1″. Hemispherical object, probably money-chest. Three horizontal lines, below :—

Śreṣṭhi-kulika-nigama.

"The corporation of bankers (*and*) merchants."

3 specimens, combined with broken and illegible seals.

(29) Circular area, single border lines, diam. $\frac{7}{8}''$. Hemispherical object, perhaps money-chest, with lid on top. Two horizontal lines, ends turned upwards, below :—

(1) Śreṣṭhi-sārtthavāha-kuli-

(2) ka-nigama (*or sometimes* nigamā).

"The corporation of bankers, traders (*and*) merchants."

See Plate XLI, 19, 23, 29, 32, and Plate XLII, 39, 40, and 46. 274 specimens.

Combined with :—

Yuvarāja-pādīya-kumārāmāty-ādhikaraṇa (1); Jayaty-Ananto Bhagavān s-Āmbaḥ (4).

Jitaṁ Bhagavataḥ (3). Nama[ḥ*] Paśupateḥ (5). Namas-tasmai (4). Ajapāla (16). Āryyanandi (6). Bhavasena (5). Bhavasena and Nāgasiṁha (1). Dharmmo-rakṣati-rakṣita (4). Ghoṣa (4). Ghoṣāḍhyasya (5). Same and another broken seal(1). Gomisvāmi (37). Gomikaputtrasya and another illegible seal (2). Goṇḍa (1). Harigupta and Varāhasya (7). Īśānadāsasya (75). Keśava-dattasya and Go- or Śo (2). Lakṣmaṇa (3). Mātṛdāsa (38). Ditto and Satyāśrita (1). Mātṛdāsa and Namas-tasmai (1). Nāgasiṁha (3). Prakāśanandi (3). Svāmikasya (4). la (18). Broken and illegible seals (20).

Seals of Temples and seals with religious legends.

(30) Pointed oval, single border line, $2\frac{1}{4}'' \times 1\frac{3}{4}''$. *Liṅga* and *yoni*, on each side *triśūla*. Horizontal line, below :—

Āmrātakeśvara.

See Plate XL, 2. 1 specimen. The *liṅga Āmrātakeśvara* was one of the eight *guhya* Liṅgas of Benares; see above, page 104.

(31) Oval area, $2\frac{1}{4}'' \times 1\frac{3}{4}''$. Ornamental *triśūla*. To right staff consisting of seven dots, *śaṅkha* and symbol for sun; to left symbol for moon and ornamental wheel. Horizontal line, below :—

(1) Śrī-Viṣṇupada-svāmi-Nā-

(2) rāya[ṇa].

"Nārāyaṇa, the Lord of the illustrious Viṣṇupada (?)."

See Plate XL, 3. 1 specimen. Perhaps a seal of the temple of Viṣṇupada at Gaya; see above, page 104.

(32) Pointed oval, single border line, $1\frac{1}{2}'' \times 1''$. Ornamental wheel on *vedi*. Two *śaṅkhas* with flowers. Horizontal line, ends turned up, below :—

(1) Jayaty-Ananto Bhagavān
(2) s-Āmbaḥ.

"Victorious is the Lord Ananta (*Śiva*) with Ambā (*Durgā*)."

See Plate XLI, 32. 4 specimens combined with :—
Śreṣṭhi-sārtthavāha-kulika-nigama.

(33) Pointed oval, single border line, $1\frac{1}{2}'' \times 1''$. Turban (cūḍā). Small and large horizontal line, below :—

[J]itaṁ Bhagavatā "Victorious is the Lord."

4 specimens, combined with Kulika-Nāgadattasya (2) Kulika-Varmmasya (1), broken seal (1). There are large horizontal *mātrās* over the letters *ta*, *bha* and *va* and the alphabet resembles that of the inscription of Candra[gupta I, ?] on the Iron Pillar at Meherauli. *Bha* is written or , and *va* ʊ.

(34) Same inscription. Pointed oval, $1\frac{1}{4}'' \times 5''$. Ornamental wheel, two *śaṅkhas*, horizontal line.

1 specimen.

(35) Pointed oval, single border line, $1\frac{1}{2}'' \times 1''$. Ornamented *triśūla*, two *śaṅkhas*. Small and large horizontal line, below :—

Jitaṁ Bhagavataḥ "Victorious is the Lord."

2 specimens.

(36) Same inscription in two lines. Rectangular area, $1'' \times \frac{1}{2}''$. Ornamental wheel. Horizontal line, ends turned upwards.

See Plate XLII, 50. 3 specimens, combined with Śreṣṭhi-sārtthavāha-kulika-nigama.

(37) Circular area, diam. $2''$. Shield (?) on *vedi*, two *śaṅkhas*. Small and large horizontal line, below :—

(1) [Jitaṁ Bha]gavato-nantasya Naṁde-
(2) [sva]rī-vara-svāmina[ḥ*].

"Victorious is the Lord Ananta (*Śiva*), the chosen husband of Nandeśvarī (*Durgā*)."

1 specimen. Letters very faint and reading doubtful. Nandā occurs as a name of Durgā.

(38) Pointed oval, $1\frac{1}{8}'' \times \frac{1}{2}''$. Ornamental wheel. Small and large horizontal line, below :—

Nama[ḥ*] "Adoration."

2 specimens, one combined with Kulika-Śālibhadrasya.

(39) Oval, single border line, $1'' \times \frac{3}{5}''$. Inside :—

Nama[ḥ*] Paśupate[ḥ] "Adoration to Paśupati (Śiva)."

6 specimens, combined with Śreṣṭhi-sārtthavāha-kulika-nigama (5) and with Kulika-Nāgadattasya (1).

(40) Pointed oval, $\frac{7}{8}'' \times \frac{1}{2}''$. Ornamented wheel. Two horizontal lines, ends turned upwards, below :—

Namas-tasmai "Adoration to Him."

See Plate XLII, 40. 7 specimens combined with Sreṣṭhi-sārtthavāha-kulika-nigama (4); Kulika-Harisya (2); Kulik-Omabhaṭṭa (1).

(41) Same inscription. Pointed oval, indented border line, $1\frac{3}{8}'' \times \frac{7}{8}''$. Front view of wheel, two *śankhas*. Two horizontal lines, ends turned upwards.

See Plate XLII, 39. 2 specimens, combined with Śreṣṭhi-sārtthavāha-kulika-nigama and Mātṛdāsa (1); Kulika-Nāgadattasya (1).

Seals of private individuals.

(42) [Ai]katanika[sya].
Pointed oval, $1\frac{1}{2}'' \times 1\frac{1}{4}''$. Ornamented *triśūla* two lines. 3 specimens. See Plate XLII, 48.

(43) Ajapāla.
Pointed oval, thick border line, $1\frac{1}{4}'' \times \frac{3}{4}''$. Ornamented wheel, two lines. See Plate XLI, 19. 17 specimens, combined with Śresthi-sārtthavāha, etc., on 16.

(44) Āryya bhaṭṭa (?).
Pointed oval, $1\frac{1}{8}'' \times 5''$. Ornamented *triśūla*, two lines. 1 specimen combined with Prathama-kulik-Ograsiṁhasya and Vaḍasya.

(45) Āryyanandi.
Pointed oval, $1\frac{1}{4}'' \times \frac{7}{8}''$. Ornamented wheel, two *śaṅkhas*, small and large line. See Plate XLI, 20. 27 specimens combined with :—
Śreṣṭhi-sārtthavāha, etc. (6) ; Kulika-Gauridāsasya (4) ; Kulika-Goṇḍasya (3) ; Kulika-Kṛṣṇadattasya (2) ; Kulika-Śālibhadrasya (4) ; Prathama-Kulika...... (1) ; Śreṣṭhi-Śrīdāsasya (2).

(46) Ārya-Ruṣideva (*read* Ṛṣi-deva).
Pointed oval, indented border, $1\frac{1}{4}'' \times \frac{3}{4}''$. Two *pādukas*, two lines, ends turned up.
1 specimen, combined with Kulika-Harisya.

(47) Bappacandra.
Pointed oval, indented border, $1'' \times \frac{1}{2}''$.
1 specimen combined with Bhavasena.

(48) Barggaḥ.
Circular area, single, border line, diam. $\frac{5}{8}''$. Front view of wheel, two *śaṅkhas*, two lines. 1 specimen.

(49) Bhavadāsa.
Pointed oval, $1\frac{1}{8}'' \times \frac{11}{16}''$. Ornamented wheel, two lines, ends turned upwards.
2 specimens, combined with Kulik-Omabhaṭṭa (1) and Kulika-Śālibhadrasya (1).

(50) Bhavasena.
(*a*) Pointed oval, single border line, $1\frac{1}{2}'' \times 1''$. Shield, small and large lines, ends turned upwards. See Plate XLI, 21.
(*b*) Pointed oval, indented border, $1\frac{1}{4}'' \times \frac{5}{8}''$. Two *pādukas*, two lines. Letter *bha* looks almost like *ga*.
35 specimens. Combined with Śreṣṭhi-sārtthavāha, etc. (5) ; Bappacandra (1) ; Kulika-Dhaṇasya (8) ; Kulika-Hariḥ (1) ; Kulika-Śālibhadrasya (8) ; ditto and Nāgasiṁha (2) ; Kulik-Omabhaṭṭa and Nāgasiṁha (3) ; Nāgasiṁha and Śreṣṭhi-Sārtthavāha, etc. (1) ; Sārtthavāha-Doḍḍa (3).

(51) Brahmapālitasya.
(*a*) Pointed oval, $1\frac{3}{8}'' \times \frac{7}{8}''$. Ornamented wheel, three lines, ends of upper and lower one turned upwards. See Plate XLII, 55.
(*b*) Pointed oval, single border line, $1'' \times \frac{5}{8}''$. Same emblem as (*a*) with two *śaṅkhas* and two lines only.
(*c*) Pointed oval, single border line, $1\frac{1}{4}'' \times \frac{3}{4}''$. Two *pādukas*, two lines.
6 specimens, combined with Kulika-Harisya (1) ; Kulika-Śālibhadrasya (1) ; Prathama-kulika-Hariḥ (1).

(52) (1) Brahmarakṣi-
(2) tasya.
Pointed oval, $1'' \times \frac{5}{8}''$. Three *pādukas*, one line. 1 specimen.

(53) Butta.........(damaged).

Pointed oval, indented border, $1\frac{1}{2}'' \times \frac{3}{4}''$. Ornamented wheel, two *śaṅkhas*, one line.
1 specimen combined with......candraḥ.

(54) Cakradāsa.
Pointed oval, $1\frac{1}{8}'' \times \frac{3}{4}''$. Six-rayed star, two lines. 2 specimens

(55) Dharmmo-rakṣati-rakṣita (proper name?).
(*a*) Pointed oval, single border line, $1'' \times \frac{5}{8}''$. Ornamented wheel, six-petalled flower on each side, and small ornamented wheel in each corner. Inscription in one line. See Plate XLI, 22.
(*b*) Pointed oval, $1'' \times \frac{3}{4}''$. Ornamented wheel with two *śaṅkhas*, small and large line. Inscription in two lines.
6 specimens, combined with Śresṭhi-sārtthavāha, etc. (4).

(56) Ghoṣa.
Pointed oval, single border line, $1\frac{1}{8}'' \times \frac{3}{4}''$. Twelve-rayed star, two lines, ends turned upwards. See Plate XLI, 23.
5 specimens, combined with Śresṭhi-sārtthavāha, etc. (4).

(57) Ghoṣāḍhyasya.
(*a*) Pointed oval, single border line, $1\frac{1}{8}'' \times \frac{5}{8}''$. Ornamented wheel, small and large line.
(*b*) Slightly different as regards wheel and horizontal lines. *O-mātrā* over left hand part of *gha* not, as usual, over central part. See Plate XLI, 24.
10 specimens, combined with Śresṭhi-sārtthavāha, etc. (6); Kulika-Umāpālita (2).

(58) Go—(or Śo—). Broken seal, head of cow with two *pādukas* between horns, two lines with ends turned upwards.
2 specimens combined with Śresṭhi-sārtthavāha, etc., and Keśavadattasya.

(59) (1) Gomika [putrasya Śresṭhi]—(2) Kuloṭasya "(*Seal*) of the banker (*Seṭh*) Kuloṭa, the son of Gomika." (*See* 88, Kuloṭasya.)
Pointed oval, indented border, $2'' \times 1\frac{1}{2}''$. Ornamented wheel, two *śaṅkhas*, small and large line with turned ends.
2 specimens combined with Śresṭhi-sārtthavāha, etc.

(60) Gomisvāmi.
Pointed oval, $1\frac{1}{8}'' \times \frac{7}{16}''$. Two *pādukas*, two lines. See Plate XLI, 25. Right-hand line of *o* expressed by curve attached to bottom of letter.
42 specimens, combined with Śresṭhi-sārtthavāha, etc. (37); Kulika-varggasya (1); Kulik-Ograsena (1); Prathama-kulik-Ograsiṅhasya (1).

(61) Gomuṇḍaka.
Pointed oval, indented border, $1\frac{1}{4}'' \times \frac{3}{4}''$. Flag-staff in *kalaśa*, two lines with turned ends. See Plate XLI, 26.
4 specimens, combined with Kulik-Omabhaṭṭa (1).

(62) Goṇḍa (*cf.* Kulika-Goṇḍasya, No. 75).
Pointed oval, indented border, $1\frac{1}{4}'' \times \frac{5}{8}''$. Two *pādukas*, two lines with turned ends.
2 specimens, combined with Śresṭhi-sārtthavāha, etc. (1) and Kuloṭasya (1).

(63) [Gu]ravasya.*
Pointed oval, single border line, $1\frac{1}{4}'' \times \frac{3}{4}''$. Fire-altar and two *pādukas*, two lines. See Plate XLI, 27.
4 specimens, combined with Kulika-Kṛṣṇadattasya.

(64) [Ha]ridāsa. (?)
Rectangular area, $1'' \times \frac{1}{2}''$. Ornamented wheel, small and large line. 1 specimen.

(65) Harigupta.
Pointed oval, indented border, $1\frac{1}{2}'' \times 1''$. Ornamented wheel, two lines with turned ends. See Plate XLI, 29.

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* For this name see *Ind. Ant.*, XIV, p. 140.

7 specimens, combined with Śreṣṭhi-sārtthavāha, etc., and Varāhasva.

(66) Īśānadāsasya.

(*a*) Pointed oval, single border line, $1\frac{1}{4}'' \times \frac{5}{8}''$. Two *pādukas*, small and large line. See Plate XLI, 30.

(*b*) Similar type, indented border, $1'' \times \frac{3}{4}''$, *pādukas* very clumsy.

(*c*) Long oval, $1\frac{1}{2}'' \times \frac{3}{8}''$. Inscription in line with longer side, small *pādukas* in left-hand corner. See Plate XLI, 31.

110 specimens. Combined with Śreṣṭhi-sārtthavāha, etc. (75); Kulika-Dhanasya (3); Kulika-Harisya (2); Kulika-Śālibhadrasya (6); Kulika-Sukhita (1); Kulik-Omabhaṭṭa (9); Prathama-kulika-Hariḥ (13); Broken and illegible seal (1).

(67) Jayadeva.

Oval area, $\frac{7}{8}'' \times \frac{5}{8}''$. Two *pādukas*, two lines with turned ends.

1 specimen combined with Kulika-Śālibhadrasya.

(68) Keśavadattasya.

(*a*) pointed oval, $\frac{3}{4}'' \times \frac{5}{8}''$. Ornamented wheel, two *śaṅkhas*, small and large line. Inscription in two lines.

(*b*) Similar type but larger ($1\frac{3}{8}'' \times \frac{3}{4}''$), and inscription in one line of writing.

3 specimens combined with Śreṣṭhi-sārtthavāha, etc., and Go-(or Śo-) (2); Kulika-Nāgadattasya (1).

(69) Keśavasya.

Pointed oval, upper part broken, diam. $\frac{1}{2}''$. 1 specimen combined with Mātṛvarmaṇaḥ and two broken seals with tree as emblem.

(70) Kulika-............ (proper name indistinct).

Circular area, diam. 1″. *Kalaśa*, two lines with turned ends, two *śaṅkhas*.

1 specimen combined with Brahmarakṣitasya.

(71) (1) Kulika-Bhagadatta-(2) sya.

Circular area, single border line, diam. $\frac{3}{4}''$. *Kalaśa* with two branches, two lines with turned up ends.

3 specimens combined with *la*.

(72) Kulika-Dhanasya.

Circular area, diam. 1″. *Kalaśa*, two *śankhas*, two lines with turned up ends.

4 specimens combined with Īśānadāsasya (3); broken seal (1).

(73) Kulika-Dhaṇasya.

Circular area, single border line, diam. 1″. *Kalaśa* with three flower stalks, two *śaṅkhas*, two lines.

9 specimens, combined with Bhavasena (8).

(74) Kulika-Gauridāsasya.

(*a*) Circular area, indented border, diam. $1\frac{1}{8}''$. *Kalaśa* with five flowers, two *śaṅkhas*, one line. Below inscription two indented lines, points inward.

(*b*) Circular area, single border line, diam. $\frac{7}{8}''$. *Kalaśa* with three flowers, two lines with turned up ends. See Plate XLI, 28. Right-hand *mātrā* of *au* in shape of curve attached to bottom of letter.

7 specimens, combined with Āryyanandi (4); Nāga-siṅha (2); illegible seal (1).

(75) Kulika-Goṇḍasya (*cf.* Goṇḍa, above No. 62).

Circular area, single border line, diam. $\frac{15}{16}''$. *Kalaśa* with six small leaves, two *śaṅkhas*, two lines with turned up ends. See Plate XLI, 33. Right-hand *mātrā* of *o* consisting of curve attached to bottom of letter.

4 specimens, combined with Āryyanandi (3); alone (1).

(76) Kulika-Hariḥ. (See No. 99.)

Circular area, single border line, diam. $\frac{7}{8}''$. *Kalaśa* and two *śankhas*, two lines with turned ends. See Plate XLII, 37.

11 specimens, combined with Bhavasena (1); Nāga-siṁhaḥ (10).

(77) Kulika-Harisya. (See No. 99.)

Circular area, diam. 1⅛″. *Kalaśa* with two *śaṅkhas*, two lines with turned ends. See Plate XLII, 36.

13 specimens, combined with Ārya-Ruṣideva (1); Brahmapālitasya (1); Īśānadāsasya (2); Prakāśanandi (5); Prakāśanandina[ḥ*] (2); Namas-tasmai (2).

(78) Kulika-Kṛṣṇadattasya.

(*a*) Circular area, lined border, diam. 1″. *Kalaśa*, two *śaṅkhas*, two lines with turned ends.

(*b*) Circular area, single border line, diam. ¾″. Small *kalaśa* with two branches, two *śaṅkhas*, short and long line. See Plate XLI, 27.

(*c*) Very similar to (*b*), but indented border, diam. ⅞″.

8 specimens, combined with Āryyanandi (2); Guravasya (4); Mātṛdāsa (1); Satyāśrita (1).

(79) Kulika-Nāgadattasya.

(*a*) Pointed oval, 1¼″ by ¾″. *Kalaśa* with flower and two branches, small and large line.

(*b*) Circular area, diam. 15/16″. *Kalaśa* with two branches, two lines with turned ends.

(*c*) Circular area, diam. 1″. *Kalaśa*, two *śaṅkhas*, two lines with turned ends.

(*d*) Circular area, diam. 1¼″. *Kalaśa* with flower and two branches, two small objects like flowers, small and large line.

5 specimens, combined with Jitaṁ Bhagavatā (1); Nama[ḥ*] Paśupate[ḥ] (1); Namas-tasmai (1); Keśavadattasya (1); broken seal (1).

(80) Kulika-Nandasya.

Circular area, diam. 1″. *Kalaśa*, two *śaṅkhas*, small and large line.

7 specimens, all on one lump of clay, more or less damaged.

(81) Kulika-Śālibhadrasya.

(*a*) Circular area, lined border, diam. ⅞″. *Kalaśa*, two *śaṅkhas*, small and large line. See Plate XLII, 43.

(*b*) Circular area, double lined border, diam. 1″. *Kalaśa* with three flowers, two *śaṅkhas*, two lines with turned ends.

(*c*) Circular area, single border line, diam. 1″. *Kalaśa* with flower and two branches, two *śaṅkhas*, two lines with turned ends. See Plate XLII, 34.

(*d*) Circular area, lined border, diam. ⅞″. *Kalaśa*, two *śaṅkhas*, small and large line. Inscription in two lines. See Plate XLI, 20.

(*e*) Circular area, lined border, diam. 1″. *Kalaśa* with two branches, no *śaṅkhas*, two lines.

In (*a*), (*b*) and (*c*) *Śā* is written cursive, with the *ā-mātrā* expressed by a curve at bottom.

29 specimens, combined with Nama (1); Āryyanandi (4); Bhavadāsa (1): Bhavasena, (8); Bhavasena and Nāgasiṅha (2); Brahmapālitasya (1); Īśānadāsasya (6); Jayadeva (1); Nāgasiṅha (2); Prakāśanandinaḥ (2); Prakāśanandisya (1).

(82) Kulika-Sukhitaḥ.

(*a*) Circular area, diam. 1″. *Kalaśa* with two branches, two lines with turned ends.

(*b*) Circular area, indented border, diam. 1⅛″. Same emblem as (*a*). See Plate XLII, 35.

8 specimens, combined with Īśānadāsasya (1); Mātṛdāsa (7).

(83) Kulika-Umāp[ālita] (?)

Circular area, diam. 1″. *Kalaśa* with two branches, two *śaṅkhas*, small and large line.

3 specimens, combined with Ghoṣāḍhyasya (2) ; broken seal (1).

(84) Kulika-Varggasya.

Circular area, diam. 1″. *Kalaśa* with two branches, two lines with turned up ends.

6 specimens, combined with Āryyanandi (3) ; Gomisvāmi (1) ; la (3).

(85) [Ku]lika-Varmma[sya]

Pointed oval, 1½″ by 1″. *Kalaśa* with two branches and three flowers, small and large line.

1 specimen, combined with Jitaṁ Bhagavatā.

(86) Kulik-Ograsena ("the *Kulika* Ugrasena").

Circular area, lined border, diam. ⅞″. *Kalaśa* with small flowers, small and large line.

1 specimen, combined with Gomisvāmi.

(87) Kulik-Omabhaṭṭa ("the *Kulika* Ūmabhaṭṭa").

(*a*) Circular area, single border line, diam. 1″. *Kalasa* with flower, two *śankhas*, two lines. See Plate XLI, 21.

(*b*) Circular area, double border line, diam. 1″. *Kalaśa*, two *śankhas*, small and large line. See Plate XLI, 30.

(*c*) Similar emblems, single border line, diam. ¾″.

(*d*) Circular area, single border line, diam. 1″. *Kalaśa*, no *śankhas*, two lines with ends turned upwards.

(*e*) Circular area, diam. 15/16″. Small *kalaśa* with flower, two lines.

21 specimens, combined with Namas-tasmai (1) ; Bhavadāsa (1) ; Bhavasena and Nāgasiṁha (3) ; Gomuṇḍaka (1) ; Īśānadāsasya (9) ; Nāgasiṁha (2) ; broken seal (2) ; alone (2).

(88) Kuloṭasya (?). See No. 59.

Pointed oval, indented border, 1¼″ by ¾″. Two *pādukas*, two lines.

1 specimen, combined with Goṇḍa.

(89) Lakṣmaṇa (?).

Pointed oval, 1″ by ½″. Indistinct object, like fire-altar.

1 specimen, combined with Śreṣthi-sārtthavāha, etc.

(90) Lavaṇasya (?).

Pointed oval, 1¼″ by ½″. Two *pādukas* between horns of bull's head, two lines.

1 specimen, alone.

(91) Lo...... .. (broken).

Pointed oval, lined border, 1¼″ by ⅞″. Ornamented wheel on *vedi*, two *śankhas*, two lines.

1 specimen, alone.

(92) Mātṛdāsa.

(*a*) Pointed oval, dotted border, 1¼″ by ¾″. Two *pādukas* over *vedi*. See Plate XLII, 35 and 39.

(*b*) Pointed oval, lined border, 1″ by ½″. Two *pādukas*, two lines with ends turned upwards.

50 specimens. Combined with Namas-tasmai and Śreṣthi-sārtthavāha, etc. (1) ; Śreṣthi-sārtthavāha, etc. (38) ; same and Satyāśrita (1) ; Kulika-Kṛṣṇadattasya (1) ; Kulika-Sukhitaḥ (7) ; alone (2).

(93) Mātṛvarmaṇaḥ (? very uncertain).

Pointed oval, 1″ by ¾″. Faint traces of tree, horizontal line.

1 specimen, combined with Keśavasya and two broken seals having trees as emblem.

(94) Nāgasiṁha.

(*a*) Pointed oval, dots, indented line between two plain lines, inscription in line with longer side, 1¼″ by ¾″. See Plates XLI, 28, and XLII, 38.

(*b*) Pointed oval, double lined border, outer line indented, $1\frac{1}{4}'' \times \frac{3}{4}''$. Two *pādukas*, two lines with ends turned upwards. See Plates XLI, 21, and XLII, 34, 37, and 45.

27 specimens. Combined with Śreṣṭhi-sārtthavāha, etc. (3); same and Bhavasena (1); Bhavasena and Kulika-Śālibhadrasya (2); Kulika-Gauridāsasya (2); Kulika-Hariḥ (10); Kulika-Śālībhadrasya (2); Kulik-Omabhaṭṭa (2); Sārtthavāha-Doḍḍa (4); Śreṣṭhi-Ṣaṣṭhidatta (1).

(95) (1) Nārāyaṇadattaḥ (2) visa.

Pointed oval, $1\frac{1}{2}'' \times 1\frac{1}{4}''$. Humped bull standing on *vedi*. See Plate XLII, 41.

5 specimens, alone. I have failed to understand the last word of inscription.

(96) Prakāśanandi.

Pointed oval, $1'' \times \frac{1}{2}''$. Rays within double lined border, inscription follows longer side. See Plate XLII, 36 and 42.

15 specimens, combined with Vaiśāly-adhiṣṭhān-ādhikaraṇa (2); Śreṣṭhi-sārtthavāha, etc. (3); Kulika-Harisya (5); Prathama-Kulika-Hariḥ (2); Śreṣṭhi-Śrīdāsasya (1); broken seals (2).

(97) Prakāśanandina[ḥ*].

Similar to 96, but with larger border, $1\frac{1}{4}'' \times \frac{3}{4}''$. See Plate XLII, 43.

9 specimens, combined with Kulika-Harisya (2); Kulika-Śālībhadrasya (2); Prathama-Kulika-Hariḥ (5).

(98) Prakāśanandisya.

Similar to 96 and 97, raised margin, $1\frac{3}{8}'' \times \frac{7}{8}''$.

1 specimen combined with Kulika-Śālibhadrasya.

(99) (1) Prathama-Kulika. (2) Hariḥ. (See Nos. 76 and 77.)

Circular area, indented border, diameter $\frac{7}{8}''$. *Kalaśa*, small rays (straight lines) near top and bottom, two horizontal lines, with ends turned upwards.

23 specimens. Combined with Brahmapālitasya (1); Īśānadāsasya (13); Prakāśanandi (2); Prakāśanandinaḥ (5); broken seal (1); alone (1).

(100) Prathama-Kulik-Ograsiṅhasya [" (*Seal*) of principal *kulika* Ugrasiṅha "].

(*a*) Circular area, double lined border, diameter $1\frac{1}{2}''$. *Kalaśa* with two branches, small and large horizontal line. See Plate XLI, 25.

(*b*) Circular area, diameter $1''$. *Kalaśa* with two branches, two *śaṅkhas*, two lines. Inscription arranged in two lines of writing.

4 specimens, combined with Āryyabhaṭṭa and Vaḍasya (1) and with Gomisvāmi (3).

(101) Ravidāsa.

Pointed oval, indented border, $1\frac{1}{2}'' \times 1\frac{1}{8}''$. Persian fire-altar. See Plate XL, 9.

1 specimen, alone. From different find-spot.

(102) Ravidattasvāmi (very uncertain).

Pointed oval, lined border, $1\frac{3}{8}'' \times \frac{7}{8}''$. Ornamented wheel, small and large lines.

1 specimen, alone.

(103) Rudracandra.

Pointed oval, lined border, $1\frac{1}{4}'' \times \frac{3}{4}''$. Humped bull lying on *vedi*.

2 specimens on one piece of clay.

(104) Śa(?) ka (?).............. (not legible).

Oval, $1\frac{1}{8}'' \times \frac{7}{8}''$. *Kalaśa* with two branches, thick horizontal line.

1 specimen, combined with............Kuṇḍa.

(105) Sārtthavāha-Doḍḍa.

Circular area, lined border, diam. $1''$. *Kalaśa* on *vedi*, two *śankhas* with arrows or rays, two horizontal lines. See Plate XLII, 45.

8 specimens, combined with Bhavasena (3) ; Nāgasiṅha (4); broken seal (1).

(106) Satyāśri[ta] (?)

Pointed oval, $1\frac{1}{4}'' \times \frac{3}{4}''$. Ornamented wheel, two lines with ends turned upwards.

2 specimens, combined with Kulika-Kṛṣṇadattasya (1), and with Śreṣṭhi-sārtthavāha, etc., and Mātṛdāsa (1).

(107) [S]auvarṇṇam[i*]trasya (? very uncertain).

Pointed oval, $1\frac{1}{2}'' \times 1\frac{1}{4}''$. *Kalaśa* with two branches, two *śaṅkhas*, short and long line, ends turned upwards.

1 specimen, alone.

(108) Śivalasya (?).

Pointed oval, $1'' \times \frac{3}{4}''$. Ornamented *triśūla*, two lines.

1 specimen, alone.

(109) Śreṣṭhi-Ṣaṣ[ṭh]i[datta].

Circular area, lined border, diameter $1\frac{1}{4}''$. *Kalaśa* with six-petalled flower, two lines, ends turned upwards.

1 specimen, combined with Nāgasiṅha.

(110) Śreṣṭhi-Śrīdāsasya.

Circular area, indented border, diameter $1''$. *Kalaśa* with two branches, short and long line. See Plate XLII, 42.

3 specimens, combined with Āryyanandi (2) ; Prakāśanandi (1).

(111) Śrī-devasvā[minaḥ] (? uncertain).

Pointed oval, lined border, $2\frac{1}{4}'' \times 1\frac{3}{4}''$. Shield (?) on *vedi*, two horizontal lines.

1 specimen, alone.

(112) Svāmikasya (? uncertain).

(*a*) Pointed oval, lined border, $1\frac{1}{2}'' \times 1''$. Ornamented wheel, two *śaṅkhas*, single line.

(*b*) Pointed oval, indented border, $\frac{7}{8}'' \times \frac{3}{4}''$. Two *pādukas* (clumsy), two lines with ends turned upwards.

5 specimens, combined with Śreṣṭhi-sārtthavāha, etc. (4) ; alone (1).

(113) Vaḍasya (?).

Pointed oval, $1'' \times \frac{5}{8}''$. Two *pādukas*, two lines with ends turned upwards.

1 specimen combined with Āryyabhaṭṭa and Prathamakulik-Ograsiṅhasya.

(114) Varāhadattaḥ.

Pointed oval, $1\frac{1}{8}'' \times \frac{5}{8}''$. Ornamented wheel, single line.

1 specimen, combined with illegible seal.

(115) Varāhasya.

Pointed oval, lined border, $1\frac{1}{4}'' \times \frac{11}{16}''$. Ornamented wheel, two lines, ends turned upwards. See Plate XLI, 29.

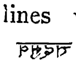
7 specimens, combined with Śreṣṭhi- sārtthavāha, etc., and Harigupta.

(116) Vargapāla.

Oblong area, blunt edges, no emblem, $1\frac{1}{4}'' \times \frac{5}{8}''$. See Plate XLI, 18.

1 specimen, alone.

(117) Vasudatta.

Pointed oval, $1\frac{1}{2}'' \times 1''$. Two *pādukas*, two lines with ends turned upwards. Inscription reversed on two specimens, thus: . See Plate XLII, 47.

4 specimens, alone.

(118) Vasudevasya (?).

Oval area, $1'' \times \frac{5}{8}''$. Bull couchant.

1 specimen, alone.

(119) Viṣṇuvarmmā (? very indistinct).

Small oval area, $\frac{5}{8}'' \times \frac{3}{8}$. 3 specimens, alone.

(120) Viśvarūpa.

Pointed oval, $1\frac{1}{8}'' \times \frac{5}{8}''$. Two *pādukas*, short and long line. 1 specimen alone.

Seals with single letters, no inscriptions, broken or illegible seals.

(121) Smoothed surface, $1\frac{3}{8}'' \times 1\frac{1}{8}''$, no border. Letter *ka* impressed. See Plate XLII, 52. 1 specimen.

(122) Letter *la* in oval centre, surrounded by rays.

(*a*) $1\frac{1}{2}'' \times \frac{3}{4}''$, indented border line.

(*b*) $1\frac{1}{4}'' \times \frac{5}{8}''$, plain border line. See Plate XLII, 46.

23 specimens, combined with Śreṣṭhi-sārtthavāha, etc. (18); Kulika-Bhagadattasya (3); Kulika-Varggasya (2).

(123) Rough surface with letters *ṇa* and *ja* stamped on it, $1\frac{3}{8}'' \times 1''$. 1 specimen.

(124) Similar piece of clay, three letters, not deciphered, seemingly meaningless. See Plate XLII, 51. 1 specimen.

(125) Oval area, $\frac{7}{8}'' \times \frac{1}{2}''$. Animal figure *en façe*, wheel to right. Small horizontal line, below indistinct traces of letters. See Plate XLII, 44. 1 specimen. From different find-place.

(126) Oval area, $1\frac{3}{8}'' \times \frac{5}{8}''$. Perpendicular line with two squares above and five loops on left side, ending into irregular curve. No inscription. See Plate XLII, 53. 1 specimen. From different find-place.

(127) Oval area, $\frac{7}{8}'' \times \frac{1}{2}''$. Spade-like object, reversed triangle in centre, top ends into dotted lines; small flag attached to lower right side of handle of spade and circle on left side. No inscription. See Plate XLII, 54. 1 specimen, from different find-place.

(128) .... kuṇḍa.

Pointed oval, $1\frac{1}{4}'' \times \frac{7}{8}''$. Ornamented wheel, two *śaṅkhas*, short and long line.

1 specimen, combined with śa (?) ka (?)...........

(129) .... mina[ḥ].

Pointed oval, $1\frac{1}{2}'' \times \frac{5}{8}''$. Eight-rayed star over Persian fire-altar.

1 specimen, combined with Kulika-Nāgadattasya.

(130) ... lakapāta (?).

Circular area, diam. $\frac{7}{8}''$. *Kalaśa* with two branches, two lines with ends turned upwards.

4 specimens.

(131) . . chanda dhruna markkatanī.........(?)

Oval area, $1\frac{1}{2}'' \times 1''$. Female standing between trees. Margins gone. See Plate XLII, 56.

1 specimen, combined with next seal.

(132) .... sya.

Oval area, lined border, $1'' \times 1\frac{1}{2}''$. Flag-staff, two lines with turned up ends.

1 specimen, combined with No. 131.

(133) .... candra.

Pointed oval, lined border, $\frac{7}{8}'' \times \frac{5}{8}''$. Ornamented wheel, short and long line.

1 specimen, combined with Buṭṭa............

(134) Oblong area, damaged, about $2\frac{1}{4}'' \times 1\frac{1}{2}''$. Two *pādukas* over crescent resting on round object. Faint traces of two lines of writing. 1 specimen.

(135) Pointed oval, $1\frac{3}{4}'' \times 1\frac{1}{4}''$. Ornamented *triśūla*, traces of *śaṅkhas* and crescent. Faint traces of inscription. 1 specimen.

(136) Circular area, diam. $\frac{5}{8}''$. Bull couchant, faint traces of inscription. 1 specimen.

(137) 2 seals with tree as emblem combined with Keśavasya and mātṛvarmmaṇaḥ.

(138) 3 seals on one piece of clay:—

(*a*) Circular, tree with railing and two *kalaśas*;

(*b*) & (*c*) Oval bull couchant, and bull facing wheel. Only one or two letters left of inscription on each seal.

(139) 4 seal impressions on one piece of clay:—
(*a*) rectangular, 1″ × ½″, bull *en façe*;
(*b*) pointed oval, 1¼″ × ⅝″, bull *en profil*;
(*c*) ditto ornamented wheel;
(*d*) traces of circular seal.

(140) 66 pieces of clay have been excluded from the list as absolutely useless. On these are still found traces of the following emblems:—
Bull (2); *kalaśa* (15); *pāduka* (2); ornamented wheel (9); front view of wheel (1); *cūdā* (turban) (1); tree (1).

Appendix

Showing corresponding numbers in List to numbers of Plates.

Plate XL,	1: 1	Plate XLI,	29: 29; 65; 115
"	2: 30	"	30: 66; 87
"	3: 31	"	31: 66
"	4: 26	"	32: 29; 32
"	5: 12	"	33: 75
"	6: 16	Plate XLII,	34: 81; 94
"	7: 13	"	35: 82; 92
"	8: 20	"	36: 77; 96
"	9: 101	"	37: 76; 94
"	10: 4	"	38: 94
"	11: 6	"	39: 29; 40; 92
"	12. 24	"	40: 29; 40
"	13: 21	"	41: 95
Plate XLI,	14: 2	"	42: 96; 110
"	15: 18	"	43: 81; 97
"	16: 17	"	44: 125
"	17: 19	"	45: 94; 105
"	18: 116	"	46: 29; 122
"	19: 29; 43	"	47: 117
"	20: 45; 81	"	48: 42
"	21: 50; 87; 94	"	49: 27
"	22: 29; 55	"	50: 36
"	23: 29; 56	"	51: 124
"	24: 57	"	52: 121
"	25: 60; 100	"	53: 126
"	26: 61	"	54: 127
"	27: 63; 78	"	55: 51
"	28: 74; 94	"	56: 131

POSTCRIPTUM.

It is curious to find the figure of Lakṣmī with two attendants and the inscription No. 3 of the preceding list on a seal attached to a copper-plate from Tippera, in Eastern Bengal, which has recently been sent to the Asiatic Society of Bengal, and is now in the hands of Babu Ganga Mohan Laskar, who is preparing an edition of it.

The seal measures about 4 inches in diameter. The attendants are seated cross-legged and pour out some liquid from round pots. The reverse bears the figure of a lotus. The plate attached to it is written in characters of the 9th or 10th century A.D, approximately, while the legend of the seal (*Kumārāmātyādhikaraṇasya*) is in the alphabet of the early Gupta kings The plate appears to contain a grant made by a person who held the office of Kumārāmātyādhikaraṇa. It begins with :—

(1) .... *Kumārāmātya-adhikaranaś-ca Sarvvaṅga-viṣaye vrā (brā) hman-ādya-purassarān-varttamānān=bhāvinaś=ca śrī-sāmanta.*

(2) .... *[vi]sayapatīn-sādhikaranān. ...... vyavahāri-janapadān=vo (bo) dhayaty-astu vo viditam*



Fig. 19.

To the left hand side of the figure of Lakṣmī is the impression of another small seal, about ¾ inch in diameter, with the figure of a boar and the legend: *Śrī Lokanāthasya*, in characters of the same type as the copper-plate inscription. It is evident that we have in this plate, as in the spurious Gaya plate of Samudra Gupta (Fleet, p. 254), an older seal attached to a plate of later date. If the inscription of the plate is not a mere forgery, which I am unable to decide at present, we should find an officer of the rank of Kumārāmātyādhikaraṇa continuing to enjoy a certain amount of territorial independence in a remote district of the East several centuries after the period of the early Gupta kings. The fact, however, that he uses the same seal as other officers of the same rank during the Gupta rule tends to show that in the various districts of

their Empire different officers of the rank of Kumārāmātyādhikaraṇa were employed, a fact which is in accordance with the inscription No. 22 in the preceding list.

I am much obliged to Dr. Vogel for his note on page 107. Leaving out the question whether *adhikaraṇa* in the seals of officials should be taken impersonal as "office" or personal as I proposed, I think that he is right in taking the words *Yuvarāja-pādīya-kumārāmāty-ādhikaraṇa* and the like as *tatpuruṣa* compounds. The officials mentioned in those seals evidently were subordinate to the Heir-Apparent (the son of Candragupta II ?) who held the office of provincial governor (of Tirhut ?). It is interesting, in this case, to learn from seal No. 12 that he also had some military force at his disposal.

T. BLOCH.

CAVES AND INSCRIPTIONS IN RĀMGARH HILL.

THE Rāmgarh Hill is situated in the Lakhanpur zamindari of the Sirguja State, 100 miles distant from the nearest railway station, Kharsia, on the Bengal-Nagpur line. The hill is well known locally and visited annually by a great number of pilgrims, who worship near the broken temple on the highest peak of the hill, which is something over 2,000 feet high.[1] The caves lie in the western slope of the northern part of the hill, which forms a long range stretching from north to south, the highest point being at the southern end. They are reached through a natural tunnel, 180 feet long and so high that an elephant can easily pass through it. Hence its name *Hāthipol*. At the western end of this tunnel the slope of the hill forms itself into a crescent, overlooking a thickly-wooded valley closed to the west by a parallel range of the same hill. Both caves are open to the west. The northern one is called Sītābengā and the southern one Jogīmārā cave.

The two inscriptions inside these caves have recently been discussed by M. l'Abbé Boyer, whose readings and translations, unfortunately, are based upon the imperfect facsimiles published by General Cunningham in the first volume of the C. I. I.[2] My own readings are based upon a study of the inscriptions on the spot, the two photographs, of which facsimiles are given on Plate XLIII (*a*) and (*b*) and two paper impressions, which I took away with me from Rāmgarh.

The characters of both inscriptions are almost alike and hardly differ from the ancient Brāhmī employed in the Aśoka inscriptions. *Ya* is expressed by the wedge-shaped form in both inscriptions, and *śa*, which only occurs in the Jogīmārā inscription, has the central line sloping down from the middle of the left-hand stroke of the letter, not from the top. There are no long vowels *ā*, *ī*, or *ū* in the Jogīmārā inscription, while in the Sītābengā inscription *ā* and *ū* occur. Both inscriptions employ a vertical line as a mark of interpunctuation to divide such parts of the sentence as form more or less connected groups. Similar divisions are noted in the Aśoka inscriptions by leaving a blank space between the end and the beginning of two such groups. The

[1] For a description of all the antiquities of the hill see Ball, *Ind. Ant.*, II, 243 ff. and *Jungle Life in India*, page 323; Beglar, *A. S. R.*, XIII, page 31; and my last annual report for the year ending with April 1904, Part II, page 12.

[2] *Journal Asiatique*, X, Série, tome III, No. 3, Mai-Juin 1904, page 478. A further translation was given by Hara Prasad Shastri in *Proceedings A. S. B.*, 1902, page 90.

practice of the Rāmgarh inscriptions, which revives only many centuries later in inscriptions and manuscripts, curiously reminds one of the single sloping wedge that is used as a divider of words in the Achæmenian cuneiform inscriptions in the ancient Persian language.

Sītābengā Inscription [Plate XLIII(*a*)].

Two lines, 3 feet 8 inches long each. Average size of letters 2½ inches. The inscription is written just below the roof of the cave on the northern side of the entrance. The end of both lines has been smeared over with cement, which I found it impossible to scratch off with ordinary knives. Hence the last letters in both lines have become indistinct and a few more may have been lost altogether. The following is my transcript:—

(l. 1) adipayaṁti hadayaṁ ׀ sabhāva-garu kavayo e rātayaṁ . . . .

(l. 2) dule vasaṁtiyā ׀ hāsāvānūbhūte ׀ kudasphataṁ evaṁ alaṁ g. [t.]

NOTES.

There is a flaw in the rock between *e* and *rā* of line 1, and a large fissure between *ku* and *da* in line 2, which cannot mean signs of interpunctuation. The second vertical line in line 2, though rather long, evidently means a mark of interpunctuation.

The 10th letter in the first line, read as [*ḍhā*] by M. Boyer, is distinctly *bhā*. I am likewise positive in regard to the reading *ru* of the 13th letter instead of *ra* of Cunningham's facsimile. There is no sign of an *anusvāra* after *ka*, the next letter, neither is there any breakage in the rock which might lead us to supply one, as proposed by M. Boyer. The 3rd letter from the last is distinctly *rā* not *ti*. The first of the last letters of the end may have been *ta*. I do not think that more than two or three letters are missing at the end, as the surface of the rock soon becomes rough. This may be seen on the photograph.

The photograph published with this article would probably lead us to decipher the 7th letter of the 2nd line as *hi*. It is unfortunate that what is merely a small hollow in the rock looks on it like the up-stroke of the *i-mātrā*. In looking over the paper-impression I have again satisfied myself that the letter really is *ā* not *i*. The 15th letter is decidedly not *sta*, but must be read *spha*. The spiral end of the *pha* will be clearly seen on the photograph. The two last letters are almost certainly *g* and *t*, but their vowels remain uncertain.

That the opening of the 1st line must be translated by "poets venerable by nature kindle the heart," will not, I presume, be doubted. At least a more natural translation can hardly be offered. The following *e* evidently is the relative pronoun *ye*, referring to *kavayo*. As the end of the line is defective, I must leave it untranslated. From my understanding of the second line, which, however, I do not consider as final in any way, it does not seem to have belonged to the relative sentence opening with *e rātayaṁ*, and the latter appears to have formed a short attribute only. The obvious interpretation of *rātayaṁ*, as the loc. sing. of *rātrī* "at night," does not seem to fit in here.

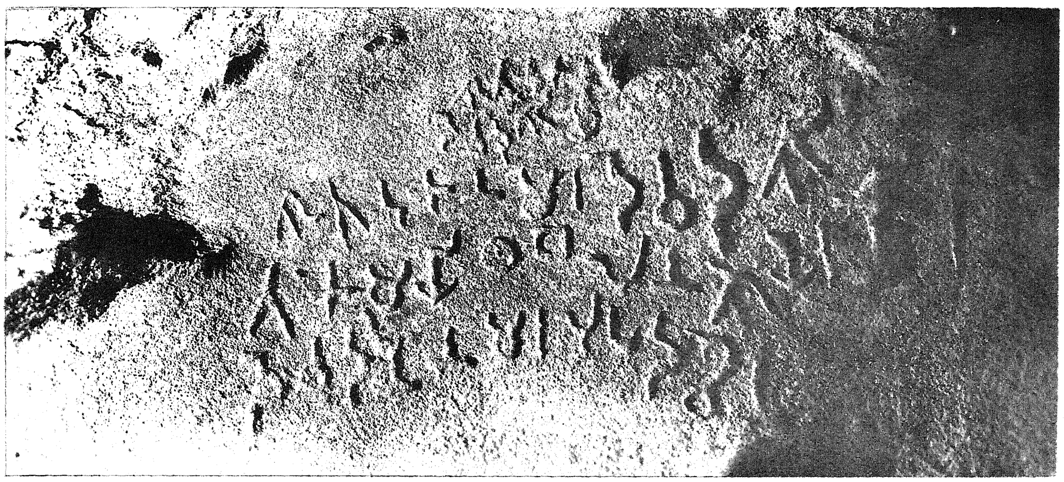
The translation of the 2nd line turns round the word *kudasphataṁ*, the letters of which are certain. By supplying an *anusvāra* after *ku* and by lengthening the *a* of *spha*, both unobjectionable alterations, if indeed they can be called alterations

CAVE INSCRIPTIONS IN RAMGARH HILL.

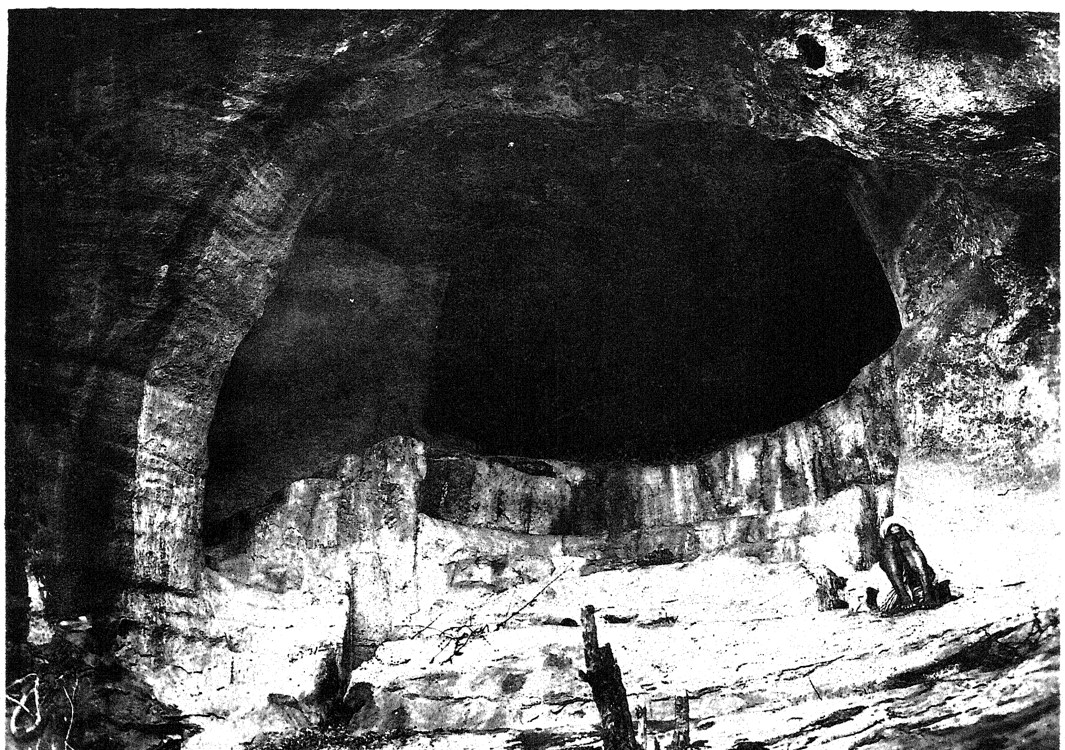
a



b



c



Photogravure. Survey of India Offices, Calcutta, May 1905.

(a.) SITABENGA INSCRIPTION. (b.) JOGIMARA INSCRIPTION.

(c.) FRONT VIEW OF SITABENGA CAVE.

at all [1] —we get *kuṁdasphātaṁ*, which in Sanskrit would be *kunda-sphītaṁ*, meaning "thick with jasmine flowers," *sphāta* being another form for *sphīta*. Evidently garlands of jasmine flowers, still worn on festive occasions, are referred to. This leads us to supply the missing vowels of the two last letters of the last word. In reading *ālaṁgeṁti* we get the 3rd pers. plur. pres. of the causative form of *ā-lag* (*cf.* Pāli *laggeti* and *lageti*, causative of *lagati*) meaning "to tie, to hang up." The two words thus may be translated as: "they (*the people*) tie (*garlands*) thick with jasmine flowers (*around their necks*)." The occasion on which they do this probably is mentioned in the opening words of the line. The obvious translation of *dule vasaṁtiyā* by "of a woman far away (*from her lover*)" would introduce a Māgadhī form (*dule*=Sanskrit *dūre*) into an inscription which otherwise shows no signs of being composed in that dialect. I propose to explain *dule* as the loc. sing. of a supposed *dula*, synonymous with *dolā* "swing," and *vasaṁtiyā* as gen. sing. of *vāsantī* (*sc. pūrṇimā*) "the vernal full moon." The great festival of the vernal full-moon in Phālguna, the modern Holī, is still called *dol-jātrā* or "swing-festival" in Bengal, and surely the name is by no means an inappropriate one. Its mention in connection with the charms of poetry likewise stands to reason. There must have existed a very ancient connection between the rustic frolics of this festival and the later dramas. Almost all the Sanskrit plays are acted on the *vasanto-tsava* or "spring-festival," and the gay sports which the people enjoy in the beginning of the Ratnāvalī, so graphically described by the king and his jester, strikingly remind one of what may still be seen in every town and hamlet in Northern India on Holī day. The words *hāsāvānū-bhūte* I take as an attribute to *dule*, corresponding to Sanskrit *hāsya-vān-odbhūte* or more correctly *udbhūta-*, similar irregular formations of compounds being by no means unheard of. I translate them accordingly "at which jokes and music abound." The only difficulty is the second long *ā* of *hāsā*, which I cannot explain. Likewise the word *evaṁ* at the end of the sentence remains meaningless in my translation.

My translation thus stands as follows :—

(l.1) "Poets venerable by nature kindle the heart, who . . . .

(l.2) "At the swing-festival of the vernal full-moon, when frolics and music abound, people thus (?) tie (*around their necks garlands*) thick with jasmine flowers."

M. l'Abbé Boyer has already (p. 481) remarked that the two lines of the inscription evidently are metrical. He suggests three demi-ślokas *anuṣṭubh*. In that case we shall have to supply six syllables at the ends of both lines together, the total number being at present only 42. It also struck me at once that the inscription probably is in verse, and I have been trying to get the two lines into the shape of an Āryā-strophe or a similar metre, but without any success. The demi-śloka-theory also does not hold good with my restoration of the end of the second line, neither can the words "*sabhāva-garu kavayo*" be turned into a regular *pāda* of an *anuṣṭubh-* verse by the insertion of an *anusvāra* after *ka*, as proposed by M. Boyer. Probably the metre of the verse follows some old popular scheme, which has gone out of fashion in later poetry.

---

[1] Short *a* for long *ā* occurs in *adipayaṁti* for *ādipayaṁti* in line 1, and the *anusvāra* has been left out in *valana* of line 4 of the Jogīmārā inscription.

Whatever may be thought of my interpretation of the last line of the inscription, I feel confident that the reading and translation of the greater part of the first line is beyond any possible doubt. As the inscription opens with a praise of the charms of poetry, we can hardly expect its general theme to have been anything else. This is something quite different from what we read in other cave inscriptions. The Sītābengā cave on the Rāmgarh Hill evidently was not the abode of pious ascetics void of all worldly attachments, but we may safely conclude that it was a place where poetry was recited, love songs were sung, and theatrical performances acted. In short, we may look upon it as an Indian theatre of the 3rd century B.C.

The arrangement of the cave was eminently suitable for this purpose. It is illustrated on Plate XLIII(*c*) and in Figs. 1 and 2; besides which the sketch plan on Plate X of Vol. XIII of Cunningham's Report may be compared.

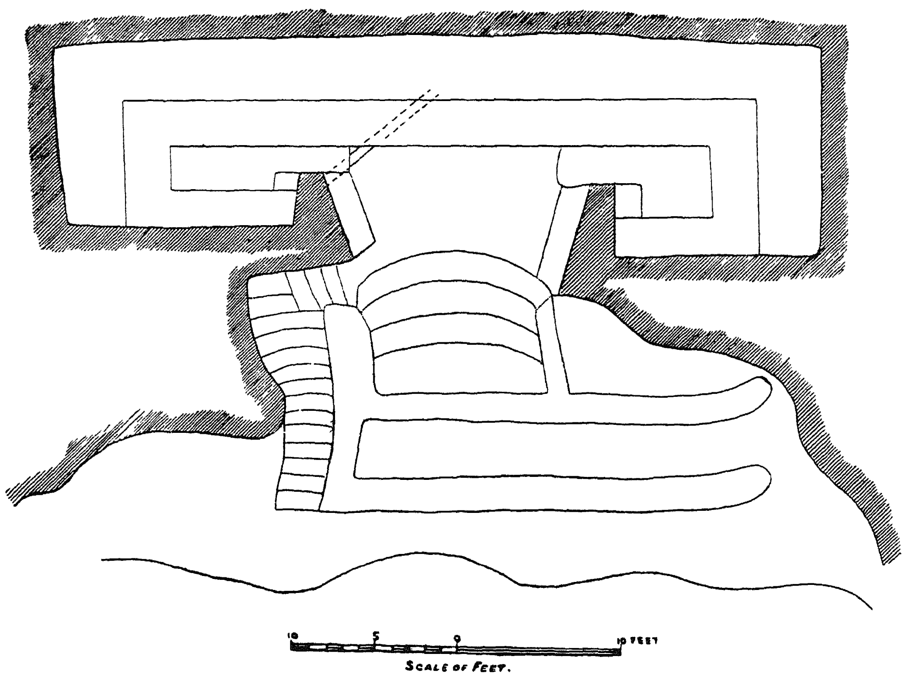


Fig. 1. Sītābengā Cave: ground plan.

In front of the entrance was a row of rock-cut benches arranged in terraces in the shape of a crescent. They have been called steps by Mr. Beglar, but must have served some different purpose, as it would have been absurd to provide steps all along the opening of the cave, even at places like the right-hand or southern end, from where no direct access can be had to the interior. Besides, the deep artificial grooves running from north to south and from east to west would serve no useful purpose. They cannot have been drains, for, having no openings, rain water would merely collect within them, and would find no outlet. But these so-called "steps" would be very suitable as benches to seat an audience watching some play or similar performances acted in front of them. The benches have been washed away to some extent by rains, and the plan in Fig. 1, I am afraid, does not afford a very accurate idea of their arrangement, especially as the traces of their continuation in the right-hand corner have not been marked. Perhaps the photograph

on Plate XLIII(*c*), will be found clearer. The bottom line in Fig. 1 merely marks a small depression in the ground, and not the end of the plateau. There is sufficient space in front of the small rock-cut amphitheatre for the erection of a stage, and the benches themselves might easily have seated some fifty or more spectators.

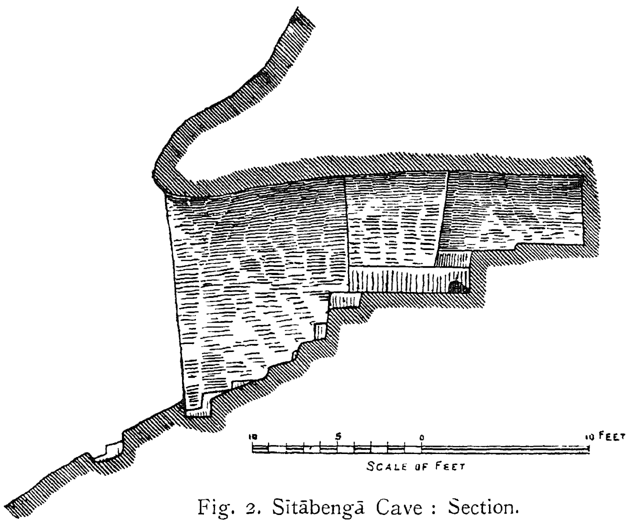


Fig. 2. Sītābengā Cave : Section.

The steps leading up to the interior will be best seen in the photograph. They are found merely on the left-hand side, none on the corresponding right-hand side. The interior forms an oblong, 46 by 24 feet. Along three sides run broad rock-cut seats, $2\frac{1}{2}$ feet high and 7 feet wide, slightly terraced by lowering the front a few inches. The ground near the entrance is somewhat lower than in the corners of the seats. The most important feature, however, are two holes, cut into the floor at the entrance, which, I regret to say, have been left out by an oversight from the plan in Fig. 1 They evidently were made to hold wooden posts, to which the curtain was fastened, which shut out the cold air of the winter nights, when the audience retired to the interior. At such times the spectators would be seated along the broad benches, and the dancing party would perform in front of the curtain that closed the door. A small rock-cut drain in the interior is shown in Figs. 1 and 2.

That the plan of the small amphitheatre in front of the cave, with its hemispherical rows of rock-cut seats rising in terraces above each other and with the pathways between them arranged somewhat like concentric circles and radiants, bears a certain resemblance to the plan of a Greek theatre, cannot, I think, be overlooked. And it will likewise be admitted that the adoption of the shape of a Greek theatre in an Indian building, that served similar purposes, has a strong bearing upon the question of the Greek influence on the Indian drama. In a recent note published in the Journal of the German Oriental Society (Vol. LVIII, page 867), Professor Lüders refers to a preliminary notice on the discovery of the theatre in the Sītābengā cave, published by me in the same Volume on page 455. He first points to certain passages in Kālidāsa's poems, which, however phantastical, show that caves in ancient India were not entirely built for anchorites, but often served quite different purposes as the abode of dancing girls and their lovers, and he very ingeniously explains the word *leṇaśobhikā* occurring in one of the Mathurā inscriptions as "cave actress." With regard to the question of the Greek influence on the Indian drama, he points to the learned work by Reich on the Greek Mimus, and he adds that, according to the researches of this scholar, the possibility—nay even the probability—of a connection between the Indian drama and the Greek Mimus cannot be put in question. I have not been able to consult the book of Reich for the purpose of this article, but I understand that his

arguments are in the main literary. However, I think it cannot be considered in the least improbable that, if Indians became acquainted with Greek theatres, the suitability of the arrangement of these must have led them to adopt similar structures for their own places of amusement. The Greek influence often stretches very far in India, and in time, I believe, we shall be able to trace it much farther than we think at present The well-known statue of Apollo carved upon one of the relic pillars at Budh-Gaya has become the prototype of the later Indian representations of Sūrya. It is shown on Plate L of Mitra's *Buddha Gaya*, and a similar figure is found inside the Ananta Cave in the Khandagiri Hill in Orissa. The *makara* of Kāma looks like a certain adoption of the Dolphin of Eros, and upon the coping stones of the Bharhut railing we find the figure of a bull having the head of a bearded man, unfortunately left out in Cunningham's photographs, in which we may easily recognize an imitation of the Greek river-gods, so common on Greek coins, whatever idea the Bharhut sculptor may have associated with this design

These are only a few instances of Greek influence on Indian Art. The amphitheatre in front of the Sītābengā Cave also forms a link in the same chain, and its bearings upon the literary side of the question of Greek influence in the Indian drama cannot be overlooked.

Jogīmārā Inscription [Plate X(*b*)].

Five lines, 1st and 2nd smaller. Length of lines 1 and 2 : 6 inches; average size of letters : 1¾ inches. Length of lines 3 to 5 : 2 feet to 1 foot 8 inches; average size of letters : 3½ inches. The inscription is engraved near the right-hand or southern side of the entrance, just below the paintings that cover the vault. The surface of the rock near the end of line 3 being too rough, the last letter is placed a little lower down, at the end of the following line 4. The following is my transcript :—

(1) Śutanuka nama
(2) devadaśikyi
(3) Śutanuka nama । devadaśikyi ।
(4) taṁ kamayitha bal[a]na śeye ।
(5) devadine nama । lupadakhe ।

NOTES.

The letters are all perfectly clear, with the exception of the 7th *akṣara* in line 4. It must be left an open question whether the small dot at the bottom of the curve of *la* can be taken as the sign of *u*. It is certainly very small and much less marked than the *u* of the word *lupadakhe* in line 5. Whether we should read *baluna* or *balana* depends upon the interpretation of the line.

The language is pure Māgadhī, and in the exclusive use of *śa* more closely connected with the Māgadhī of the grammarians than the Māgadhī of Aśoka. There is no *r*, and final *o* is throughout represented by *e*. The long vowels *ā*, *ī*, and *ū* are always expressed by short *a*, *i*, and *u*, and the *anusvāra* is written only in *taṁ* (l. 4), but omitted in *bal*[*a*]*na* (*i.e. balanaṁ* or *balunaṁ*) of the same line. The form *devadaśikyi* shows in its last syllable the palatalized form of *k*, expressed by the compound letter *ky*, which we find in the Aśoka inscriptions in Khalsi, XII, 8

(*Alikyaṣudale*), and in Dehli-Siwalik, VII, 2 (*aṁbāvaḍikyā* and *aḍhakosikyānī*), and in other instances. The palatalization of *k* very likely is due to the influence of the preceding vowel *i*.

The contents of the inscription have already been explained by M. l'Abbè Boyer in such a way that I find very little to add. Lines 1 and 2 and line 3 both should be rendered in Sanskrit as *Sutanukā nāma devadāsī.* It is interesting to find the last expression *devadāsī*, here employed in the sense of 'a dancing girl,' probably much the same as *gaṇikā*. In line 4 *taṁ* stands for Skt. *tām*, referring to *Sutanukā*. *Kamayitha* is the 3rd sg. aor., in Pāli *kāmayitthā* 'he loved,' and the subject of the sentences is found in the following two words. *Śeye* M. Boyer explains as Pāli *seyyo*, nom. sg. for Skt. *śreyān*, and *baluna*, he takes as gen. plur. of *balu*=Skt. *baṭu* 'a young fellow.' 'The excellent of young fellows,' who loved Sutanukā, was, according to M. Boyer, Devadinna by name, skilled in sculpture (*lupadakhe*=*rūpadakṣaḥ*). The translation arrived at stands thus :—

(1) "Sutanukā by name,
(2) "a Devadāsī.
(3) "Sutanukā by name, a Devadāsī.
(4) "The excellent among young men loved her,
(5) "Devadinna by name, skilled in sculpture."

It should, however, be remembered that the reading *baluna* is not quite certain; *balana*, on the other hand, which in Sanskrit would be *bālānāṁ*, hardly fits in, for the lover of a Devadāsī scarcely would have been called a 'child' (*bāla*), neither does this word look like a suitable attribute of a skilled artist. If we adopt M. Boyer's translation, I should prefer to take the small mark at the bottom of *la* as an *u* and read *baluna* with him.

Although I readily accept M. Boyer's translation as the most natural rendering of the words, I cannot refrain from proffering another interpretation, even if, in doing so, I may lay myself open to the blame of the Latin poet: *dum vitat humum, cœlum et inania captat.* Considering that the last line very probably refers to the paintings on the roof of the cave, as M. Boyer also points out, and that *lupadakhe* should be translated rather by 'skilled in painting,' the work having been done by Devadinna, we should expect in the preceding lines a statement of the fact that Sutanukā made the cave, or something similar to it. I would accordingly venture to explain *kamayitha* as a 3rd sg. aor., not of *kāmayati* but of *kaṁmāyati*, a derivative verb of *kaṁma* or *karman*, 'work,' used especially for any artificial stone work, such as *silākaṁma*, *silākaṁmānta*, etc. We have in Hindustani a similar verb *kamānā* 'to labour, work,' which may be used in expressions as *khet men kamātā hai* 'he works on the field,' and if we find it besides in the meaning 'to earn' (*rūpayā kamātā hai*, 'he earns money'), the term originated probably in the same way, as the similar English phrase 'to make money.' *Śeye* I would then take as the acc. sg. of *śaya*, being used in the neuter gender, and meaning 'a place to lie down,' the first *e* being due to false analogy with Pāli *seyyā*=Skt. *śayyā*. *Balana* I would explain as the gen. plural of *bālā* fem. or *bālikā* 'a young girl.' The translation in that case would be 'Sutanukā by name, a Devadāsī, made this resting place for girls. Devadinna by name, skilled in painting.' To what class the girls

belonged, for whom Sutanukā, evidently one of their order, provided a place to lie down, becomes clear if we remember the purpose which the other Sītābengā cave used to serve. They must have been actresses, employed in the theatre close to the place where they retired for rest.

With M. Boyer's translation we need not necessarily connect the last line (*Devadine nama* | *lupadakhe* |) with the preceding words *baluna śeye*. The 3rd and 4th lines might have formed a sentence in itself, giving the subject of the paintings on the vault of the cave, below which the inscription is engraved, and the 5th line simply might record the name of the painter. What these paintings represent cannot now be made out, and even if Sutanukā, a Devadāsī, was the heroine of a love story depicted in them, we get no further clue. So much, however, may be considered as certain, that the paintings, like the inscription, belong to the 3rd century B.C. and that they are the oldest specimens of wall-paintings that have as yet been found in India. For this reason I should have wished to publish with this article some facsimile of them, but I was unable to get good photographs taken—a task probably altogether impossible owing to the position of the roof and the worn state of the frescoes—and as I had not provided myself with tracing paper, I must postpone their publication to a future opportunity, when I am able to arrange for another visit to the hill.

The paintings have already been noticed very briefly by Mr. Beglar on page 40, Volume XIII, of Gen. Cunningham's reports. They are generally very crude and exhibit no great skill of the painter's brush. Dampness has affected them to a great extent, and large portions of the fresco have entirely disappeared, while others become visible only when the surface of the rock has been moistened. But however imperfect they may be as works of art, there can be no doubt that they are really old paintings. We find in several places the ancient *caitya*-window, and a two-wheeled carriage drawn by three horses and surmounted by an umbrella is just like similar ones in the carvings of Sanchi and Bharhut. The back-ground of the fresco is painted white all over. Upon this the figures of men and animals and the scenery likewise are painted generally with a crimson red and in some instances with black. Yellow is employed in the bands dividing the fresco into various panels. Human bodies are all in crimson red, the outlines sometimes being marked with black lines; the eyes and the hair are likewise black, the hair generally being tied into a knot on the left side of the head. Drapery is shown in red outlines upon the white back-ground. Elephants, horses, birds, and trees are painted with the same red colour as human figures. The fresco is divided into a series of concentric circles by bands of red and yellow, sometimes with a geometrical design. In order to give some idea of the contents of the paintings, I append a short description of the four best preserved panels, based upon my notes taken during my visit to the cave.

A. In centre male figure, seated under a tree, to left dancing girls and musicians, to right procession with an elephant.

B. A number of male figures, a wheel and geometrical ornaments.

C. Half of this panel is more or less indistinct and shows merely traces of flowers, houses and human figures wearing clothes. Then follows a tree with a bird and a human figure, probably a child, in its branches. Around this are a number of other human figures standing, similar to

that upon the tree, all undressed, the hair tied into a knot on the left side of the head.

D. A male figure seated cross-legged, evidently naked, with three attendants standing and wearing clothes. To the side of this group, two similar seated figures with three attendants. Below, a house with a *caitya*-window, and an elephant and three male figures wearing clothes standing in front. Near this group is seen a chariot drawn by three horses and surmounted by an umbrella; also another elephant with an attendant A similar series of seated male figures, a house with a *caitya*-window and an elephant is repeated in the second half of this panel.

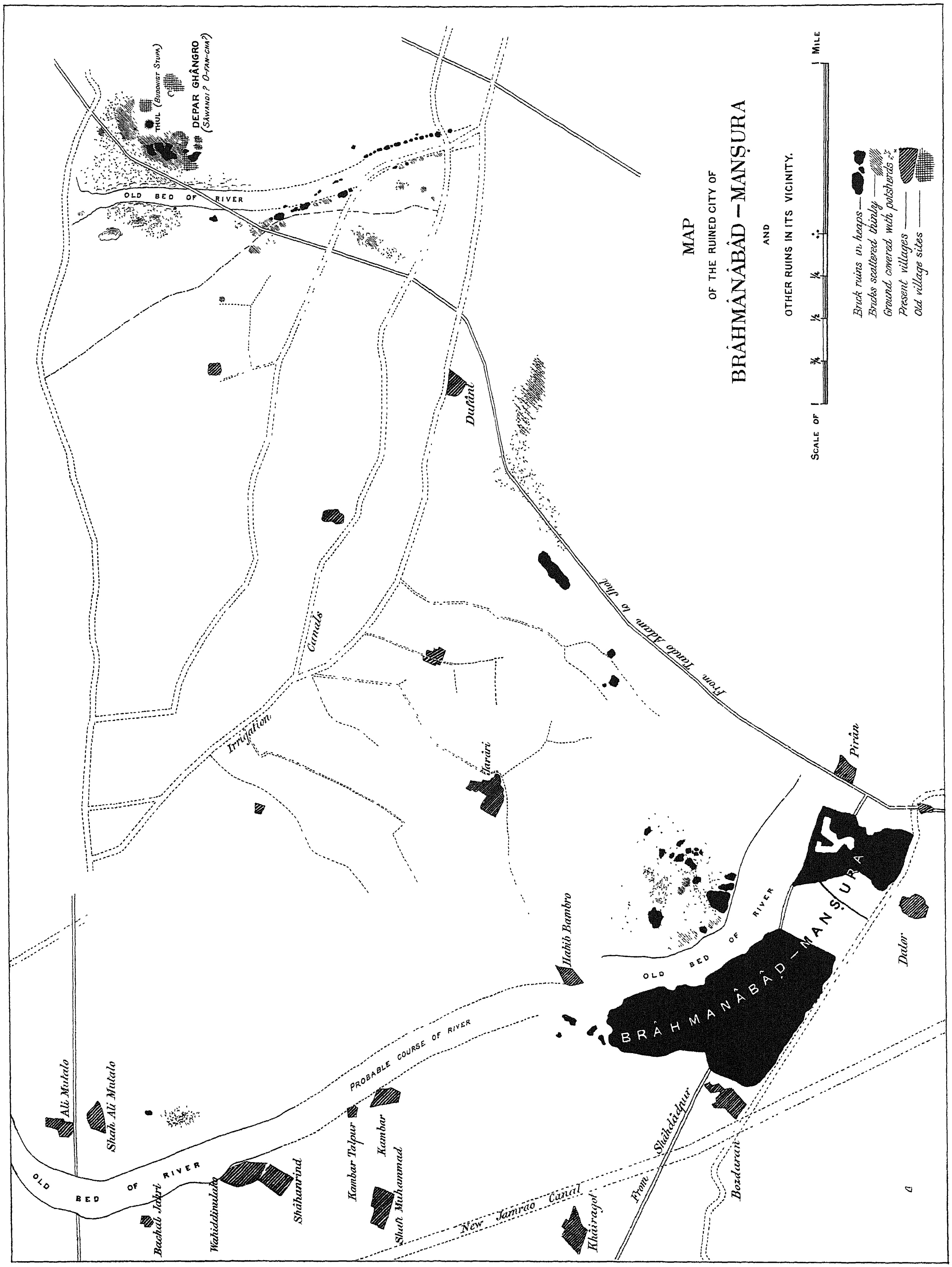
I cannot pass from these two caves and their inscriptions without noticing one more point that deserves to be mentioned. As I have already stated, the inscription in the Jogīmārā cave is written in Māgadhī. It contains the name of a Devadāsī and of an artist, and was probably written by one of those. The Sītābengā inscription is in verse and evidently the composition of some poet. Its language is closely related to the so-called Lena-dialect or the Prākrit of the other cave inscriptions. This dialect stands nearer to the Śaurasenī of the dramas in certain points, such as the retention of *r*, the final *o*, and the dental sibilant *s* instead of the palatal *ś*. Both inscriptions are of the same date. The latter one evidently was written by a person of higher social standing than the individual who wrote the Māgadhī inscription. With these facts in view, one cannot avoid noticing the similitude that exists between the use of two well-defined Prākrit dialects in these two contemporaneous inscriptions and the distribution of Śaurasenī and Māgadhī in the Indian dramas. There Śaurasenī is the language spoken by persons of a higher rank, while Māgadhī is used only by persons of low order and by children. The coincidence may be a mere chance, and certainly not too much importance should be attributed to it, but it is curious in any case, and could not, I think, for this reason, be passed over unmentioned.

T. BLOCH.

BRĀHMANĀBĀD—MANṢŪRA IN SIND.

PERHAPS the most interesting of deserted city sites in Western India is that usually known as Brāhmanābād in Sind, situated about eight miles south-east of the railway station of Shāhdādpur, and forty-three miles north-east of Hyderābād. It lies upon the open sandy plain, in rolling heaps of brick *dêbris*, scored and cross-scored with the depressions of its original streets, and engirdled by the ruins of its own massive walls and bastions. The plan of the site has very much the shape of an old top-boot, with the sole presented to the north-west, and the leg stretching towards the south-east, the whole having a circuit of five and three-quarter miles. With the exception of a considerable area towards the south-east end, the whole space is covered with billowy mounds of brick ruins. Nothing stands now above the surface, save in one place, where an unrecognizable tower-like core of brick masonry, by its very loneliness, accentuates the utter desolation around. There is a total absence of stone masonry of any kind ; but lumps of charred wood, here and there, seem to indicate the former presence of wood-work. The cementing material in the brickwork would appear to have been mud ; and it is this, the accumulation of ages, before the final downfall of the city, that forms the greater mass of the present mounds. This earth, impregnated with certain salts, the result of human occupation for so many centuries, has been found to be of use as a manure, and thus the present site is periodically harried by the people of the surrounding villages, who carry it away in great quantities to fertilize their fields. This annual process of denudation of the site has long ago obliterated all landmarks that might have proved useful in the identification of the same, or of the buildings that once jostled one another for room over its crowded area ; and it is now very surely wiping out every trace of the lower courses of the walls, which, hitherto protected within the mounds, are being uncovered and demolished by the destructive hoe of the cultivator. Former mounds are now represented by low ridges of loose brick bats, all that is left of the walls, and any testimony or objects of interest they may have contained are now lost for ever.

The site has, in a lesser degree, served as a great bran pie to many an amateur explorer and curio hunter, who, with no further purpose in view than the turning up of some find of intrinsic value, have dug and raked about in what seemed to them the most likely places. But beyond broken shell bangles, pottery sherds, occasional beads, and corroded copper coins, they have rarely found anything to repay them for their trouble. There is the spirit of gambling in it ; each new visitor hopes to be lucky where


MAP
OF THE RUINED CITY OF
BRÂHMANÂBÂD – MANṢURA
AND
OTHER RUINS IN ITS VICINITY.
SCALE OF 1 MILE
Brick ruins on heaps
Bricks scattered thinly
Ground covered with potsherds
Present villages
Old village sites
THUL (BUDDHIST STUPA)
DEPAR GHÂNGRO
OLD BED OF RIVER
Duffini
From Tando Adam to Shal
Pirân
Harâri
Irrigation Canals
Habib Bambro
BRÂHMANÂBÂD – MANṢURA
Dalor
PROBABLE COURSE OF RIVER
Ali Mutalo
Shah Ali Mutalo
Kambar Talpur
Kambar
Shah Muhammad
New Jamrao Canal
From Shâhdâdpur
Bozdaran

others have failed. They have wasted their time and patience upon a site never likely to yield much to delight their hearts; but, with the villager, they have been guilty, with more blame, of foolish acts of mischief. To them the identity of the site, its

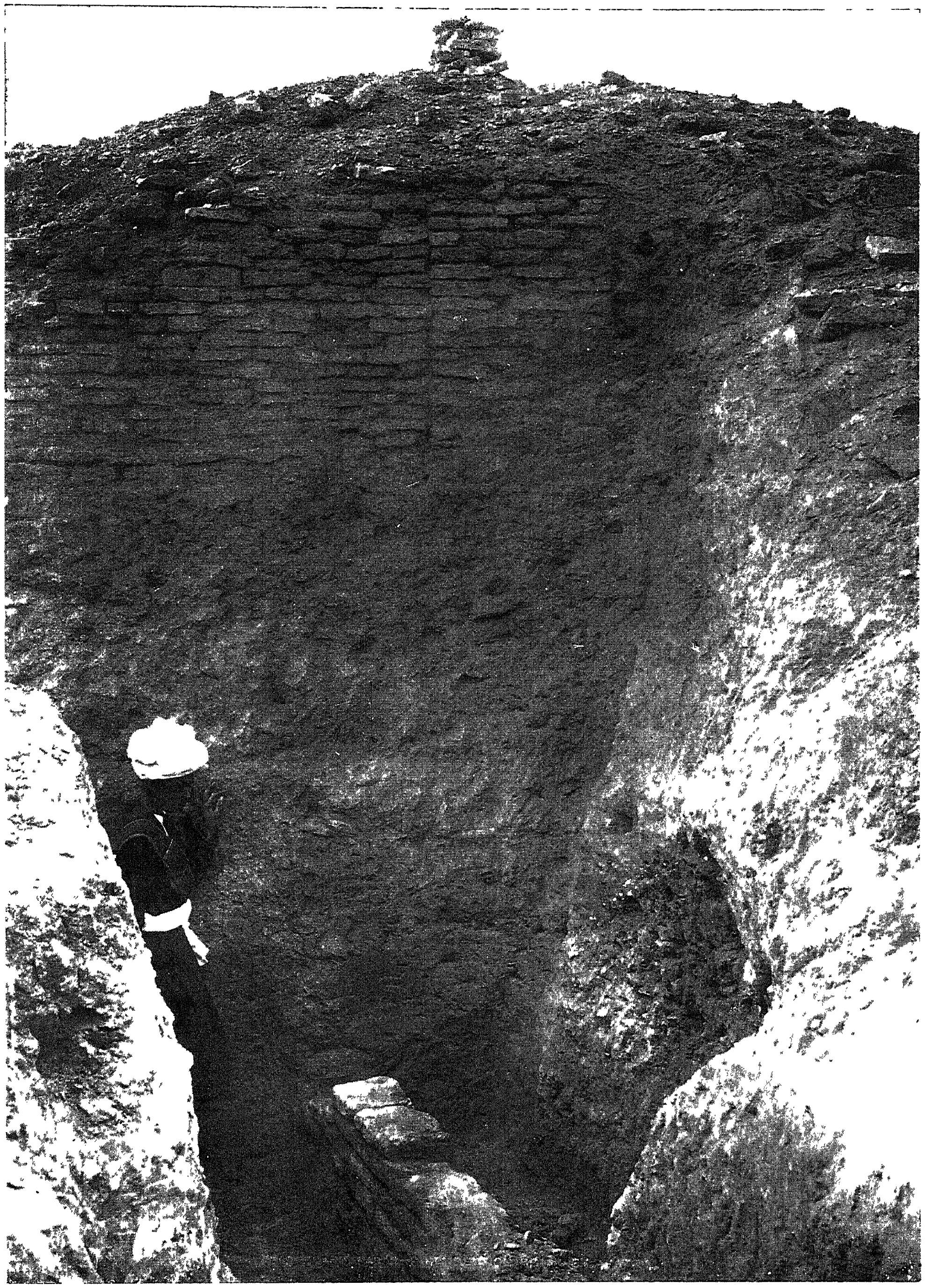


Fig. 1.

history, the customs and aspirations of its former inhabitants, are nothing so long as they can fish out some small curio, which when found they know neither the name nor use of. Yet an undisturbed armful of bricks, such as we see at the peon's feet in

Fig. 1, is of more value to him who would methodically study the site and endeavour to uncover its mysteries.

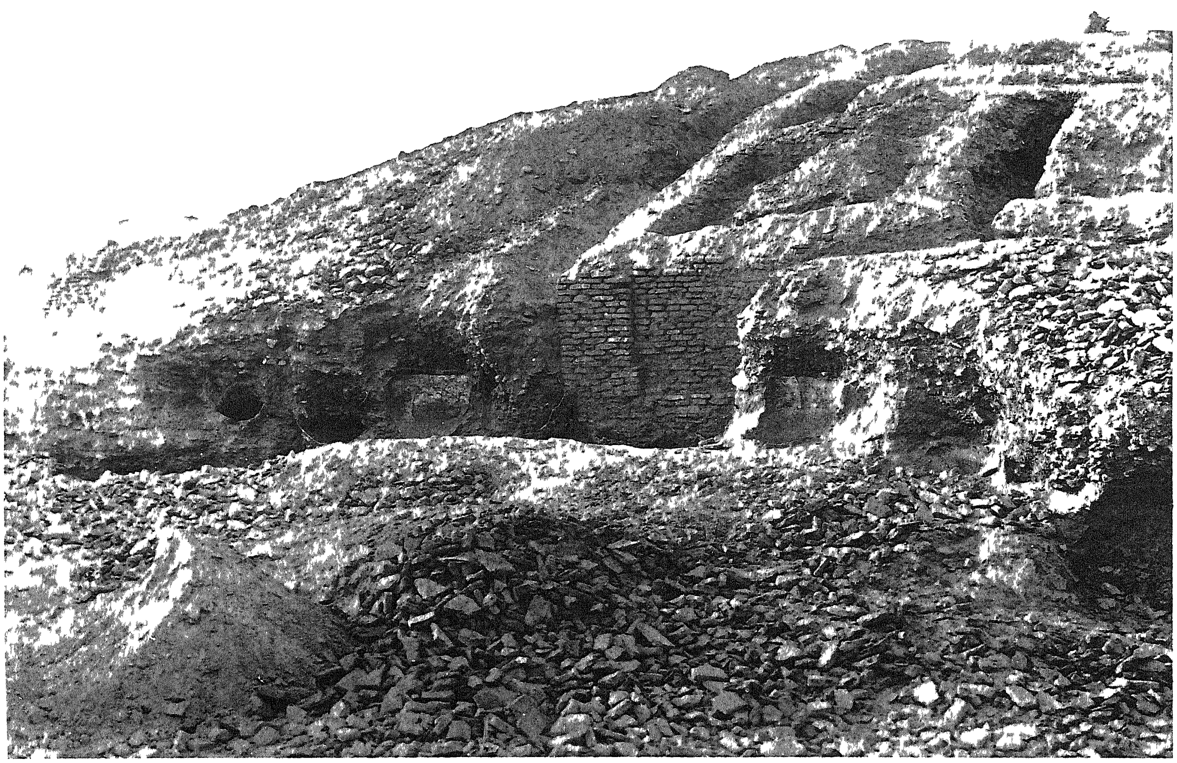
The identification of this site has provoked a certain amount of controversy, but the only writers, who have treated the subject at any length, have been Mr. Bellasis, a former member of the Civil Service in Sind,[1] and Major-General Haig.[2] The former based his conclusions chiefly upon tradition, the general appearance of the site, and what he discovered in the ruins during certain explorations which he made there, the latter relied, almost exclusively, upon historical data gleaned from various local histories, of the period of the early Arab conquests, by Muhammadan writers Though both are apparently directly at variance regarding this particular site, both, I believe, are right. The one was convinced of its identity with the ancient Brāhmanābād; the other with Mansūra, the first Arab capital in Sind, while the outcome of my own examination of the ruins is to show that it was the site of both cities, the one having been built upon the ruins of the other. I will first describe, as briefly as possible, what I found there, and then my reasons for the conclusions to which I have come

I have already mentioned the walls, wholly built of Hindu bricks, in the bottom of the mounds, far below the foundations of the upper walls of mixed bricks. In the north-west corner of the city are a number of great pits, from which earth has been carried away, and these have disclosed interesting sections through some of the high mounds. Upon the top of one of these we unearthed the foundation walls of a large building with its many small rooms, the whole building being planted upon the mound. In the sections, as shown in the sides of the pits [see Plates XLV(*b*), XLVI(*a*), (*b*), and (*c*)], numbers of great earthen jars are seen embedded. These are bowl-shaped, and measure 3′ to 3′ 6″ across the mouth, and 2′ 6″ deep. They are below the foundations of the upper walls, the latter, in many cases, cutting through them These jars have been a puzzle to me They have no flat bottom to stand upon, the bottom being round with a projecting protuberance, hence they were not intended to stand upright upon a flat surface, but to be wholly, or partly, set in the earth. If they were connected with funeral customs, such as to bury ashes in, they would have been far too large for the purpose of single interments, and one would have expected them, in such a case, to have had narrow, closed mouths. They are all in perfectly upright positions, in many cases telescoped one into another, and in some cases cutting into the sides of those below. I had several of them emptied very carefully, but could find in them nothing of a distinctive character, unless it be small quantities of ash and bits of disintegrated bone; for the rest they are filled with earth, potsherds, bits of brick, and charcoal. Their contents thus differ in nothing from that of the mounds around them The ash and bone are mixed throughout, and do not appear to have been placed in any particular position. In one I found the ash and earth in layers, with a bend downwards in the middle, and this would point to the gradual filling of the jars with earth and surface refuse washed in by successive rains and the wind. During my last tour I found just such jars, though better made, being used in the Chāndā district of the Central Provinces beside wells for holding water for cattle. I now think that these may have been used for a similar purpose, probably in connection with the royal stables, for watering

[1] *Journal of the Bombay Branch of the Royal Asiatic Society*, July 1857, No. XX of Vol. V.

[2] *Journal of the Royal Asiatic Society*, Vol. XVI, part 2.



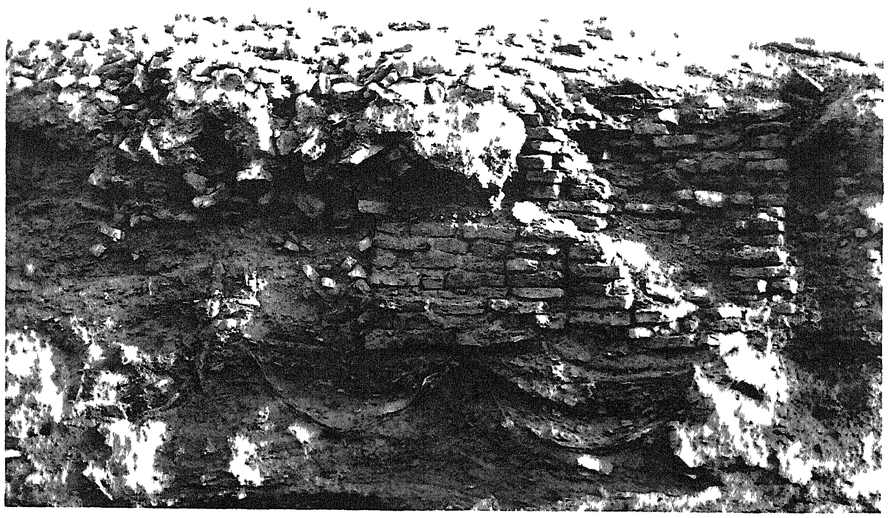


(*a*) GENERAL VIEW OF THE RUINS OF BRÂHMANÂBÂD.

(*b*) VIEW SHOWING WALLS AND BURIED EARTHEN JARS.







(*a*, *b*, *c*) EXCAVATIONS SHOWING BURIED EARTHEN JARS

the elephants and horses. In a compact and crowded city, such as this must have been, with most of its streets very narrow, it would have been very awkward to lead hundreds of animals through the town, twice a day, to the river, moreover, being of the royal stables, they would have been exempted from going for their own water. There would be a constant breakage going on with these jars, and others would be placed, perhaps, as we find them, one inside the other, to take the place of the broken ones.

Depending chiefly upon the river for their water-supply, few wells appear to have been sunk, or, at least, few traces of them now remain. There is one, partly filled in

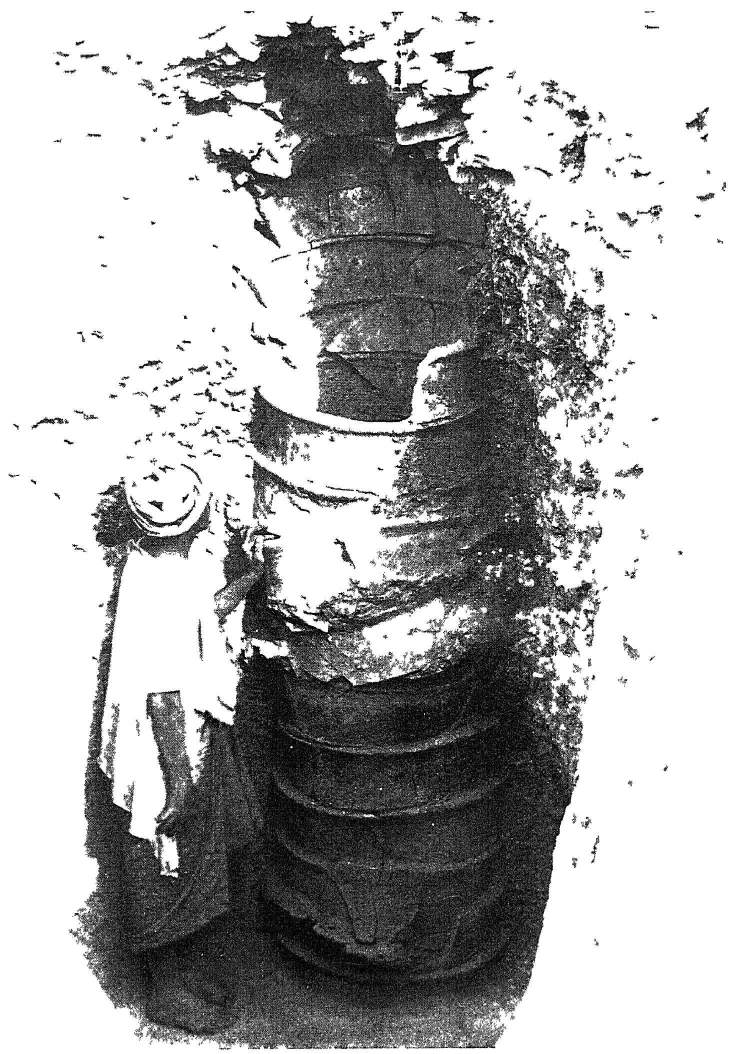


Fig 2.

about eight feet in diameter, on the plain to the east of the city, across the river bed, built of good brickwork, the bricks being large and carefully moulded to the curve of the well. Close to the large mound, in the north-west corner of the city, upon which are the foundations of the large building already mentioned, and under which are buried the great jars, is a curious deep narrow well. It is about two feet in diameter, and is formed of deep earthenware rings or cylinders, placed one above another, to form, as it were, a great vertical pipe. Each section is provided with flanges so as to prevent the

one telescoping into the other (see Fig 2). I found wells, formed of earthenware rings, still being made at Patan in North Gujarāt; but in this case, as the diameter was greater, the rings were made in two or more segments.

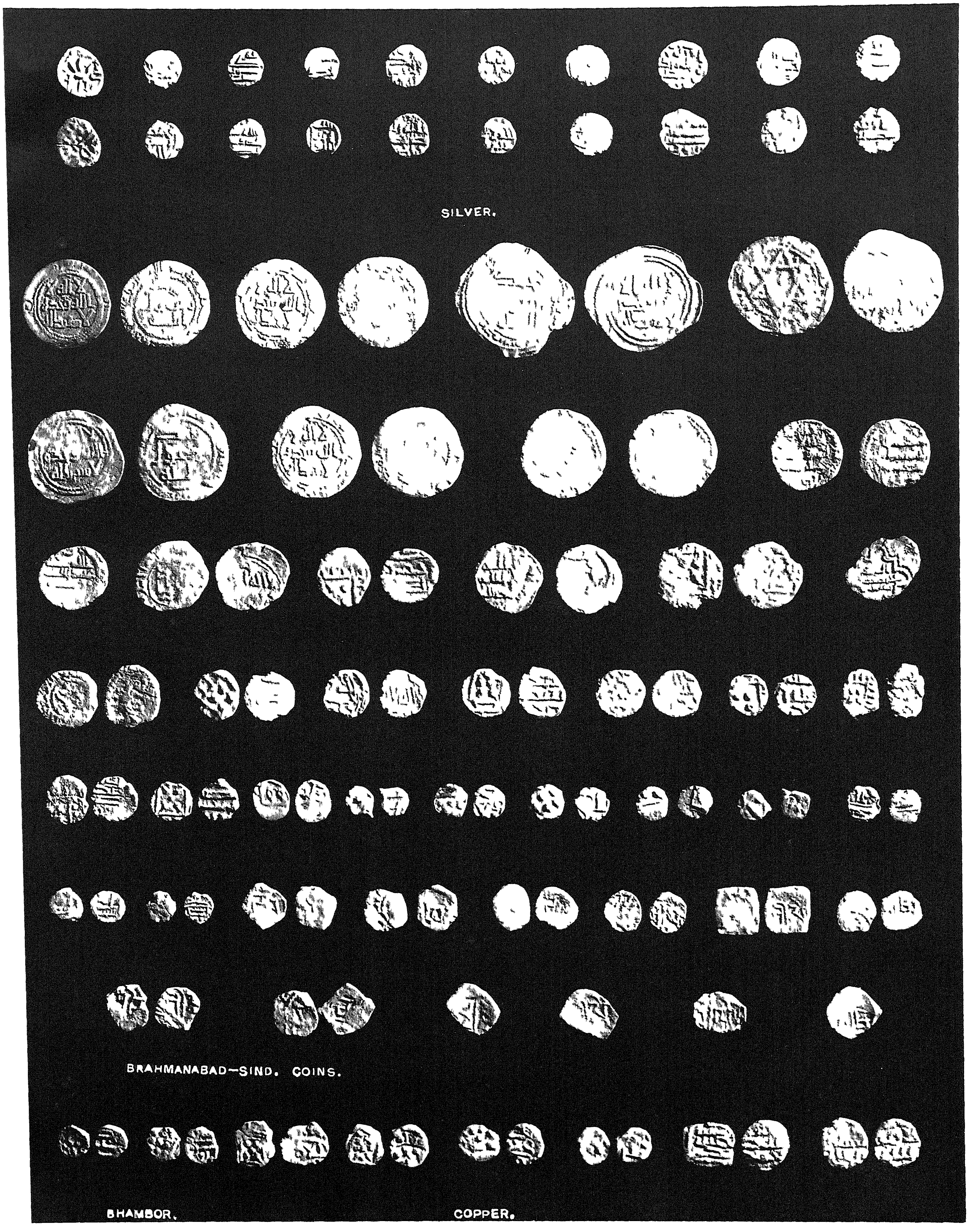
Along one street, alone, I cleared the foundations of three mosques (*cf.* Fig. 3) with their buttressed *mihrābs* all placed in the usual position, that is, directed towards Mecca. This position they seem to have got exactly, the direction being a trifle south of due west. There is no mistaking the foundation of a mosque when found As a rule, it is constructed with three walls, forming three sides of a rectangle, the fourth side, or entrance, being open. Outside of the back wall are one or more projecting buttresses, which represent the niches or *mihrābs* within, one always being in the centre of the wall. These mosques, being very small, have each but one niche and one corresponding buttress at the back, which is present in these foundations. In one mosque four pillars



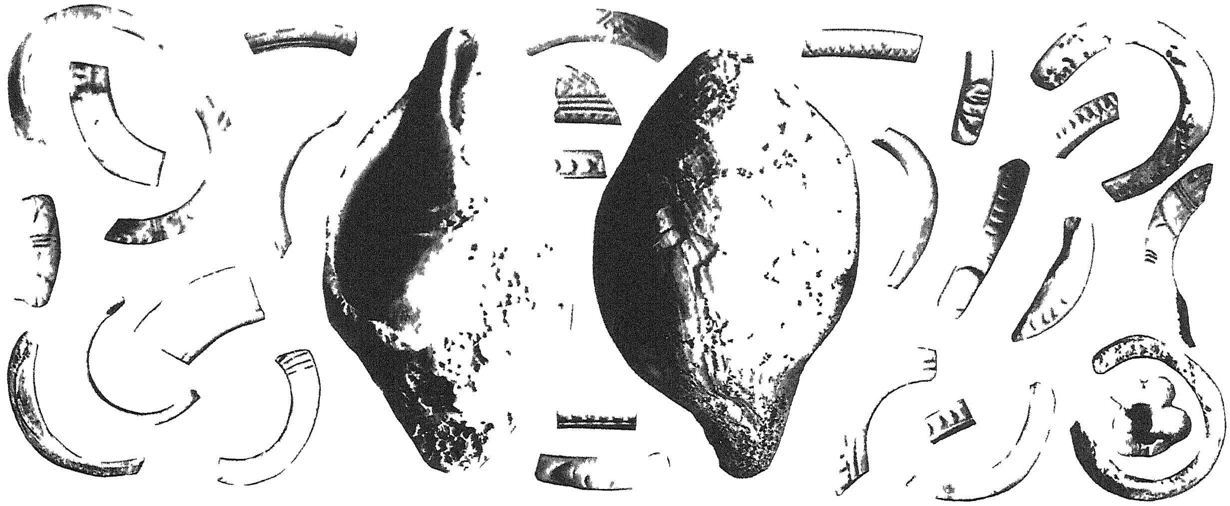
Fig 3

supported the roof, while in another two sufficed for the smaller building. The pillars were of brick, about three feet square, the bases of which still remained. The three sides of the building had heavy brick walls, while in front of the largest building was a small courtyard with an outer gateway.

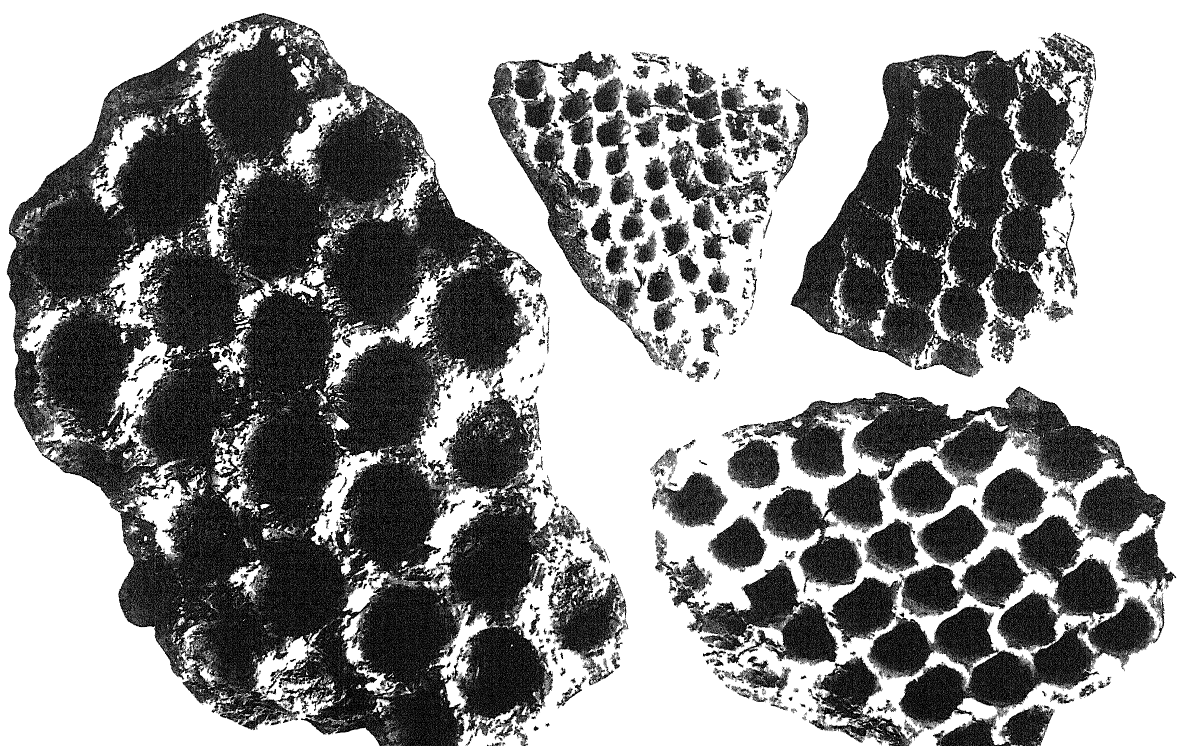
Copper coins are plentiful, being found scattered all over the site, but so corroded with verdigris that it is not often they can be cleaned with any success. Nevertheless, the corrosion having gone on equally all over the coin, the impression is often quite distinct, though there may not be a grain of pure copper core left. These coins are of two kinds. One is a very thin coin beautifully impressed with Arabic writing, part within a circle and part round the rim (see Plate XLVII). These belong to the Eastern


SILVER.
BRAHMANABAD—SIND. COINS.
BHAMBOR.
COPPER.

a



b



(*a*) SHELLS AND FRAGMENTS OF SHELL BRACELETS

(*b*) DRIED CLAY TABLETS FOR CASTING COPPER PELLETS FOR MAKING COINS

(*Full size*)

Khalīfahs, and, though some bear the names of governors of Manṣūra,[1] I am inclined to think, from their style and execution, that they were coined in the Khalīfah's own mint and not in Sind. The other kind, squat and dumpy, are very much smaller in area, and are represented by the two rows of silver coins at the top of the Plate, and in rows six, seven, and eight, among the copper ones. I think there is no doubt, whatever, that these were coined in Sind, and at Manṣūra itself, and that we have discovered the method by which they were turned out.

Heaps of honeycombed baked clay slabs are found in one particular spot, in what I should suppose the citadel, all broken into fragments [Plate XLVIII (*b*)]. These clay slabs, or cakes, are about half to three-quarters of an inch thick, upon one side of which are impressed rows of little cup-like hollows, forming a regular honeycomb pattern, while the lower sides have been subjected to great heat and are vitrified. The honeycombing I have found in three sizes, the hollows in the largest being about seven-sixteenths, and those in the smallest barely three-sixteenths of an inch in diameter. These puzzled me, when I found them first at Bhāmbor, a ruined site near one of the mouths of the Indus, upon a small heap at one corner; but, upon finding near them, both at that place and Brāhmanābād, not only copper coins, but little pellets of copper which fitted them, the real use of these curiously marked tablets became apparent. I also found many fragments with small lumps of verdigris (sub-acetate of copper) adhering to the edges of the little cells. They were, no doubt, connected with the coining apparatus of the Arabs. I take it that these slabs of clay were first heated upon a furnace, to prevent the sudden chilling of the copper poured into them; and, when filled, and all superfluous copper run off, each hollow contained a pellet of uniform size and weight. These were then placed between the dies and struck by a very heavy hammer. This mode of manufacture would account for the dumpy shape of the coins, not all of the same thickness, often thick at one side and thinner on the other, and frequently burst at the edges. The small silver coins would seem to have been made in the same way. The heating of the moulds vitrified the under sides of the slabs, and cracked them, after which they were cast aside for new moulds: hence the heaps. The thin Khalīfah coins first mentioned were, no doubt, made from sheet copper.

So far as deciphered, these coins are unmistakably connected with Manṣūra,[2] and, much corroded, are found in abundance upon the upper ruins. But, in very much smaller numbers, there are found also little thin coins, more or less square, as cut from thin sheet copper, which are certainly Hindu, for they have stamped upon them sundry old *devanāgarī* letters.

Perhaps, after brickbats, broken pottery is most plentiful among the ruins, but only in one place did I get out a whole vessel of any size, and this was cracked and soon fell to pieces. Fragments of four distinct kinds are found—common red, which is most abundant; common black, both plain and decorated; plain buff hardware, not so common; and buff ware, glazed both inside and out, which is rare. The last two kinds, I should think, were imported by the Arabs, and were not made in Sind. Amongst the first, or common red, are found the great bulk of pots which were used for water and ordinary domestic use, some of them with spouts and lids. There were also found

[1] See Thomas' *Prinsep*, Vol. II, pages 119-124.
[2] See one of the smaller coins figured in the *Journ. Bom. Br. R. A. S.*, Vol. X (1873-74), p. 166.

small plates and saucers with little handleless cups or tumblers, and little lipped vessels for *battīs* or lamps. All these are in the common unglazed ware. At Depar Ghāngro we dug up, in the open plain, fragments of at least four pots or goblets of different patterns. Of one we got together sufficient pieces to reconstruct it by joining them together on a lump of clay—just half the vessel. Fig. 4 is a photograph of the same. The back elevation does not exist. I found one of the moulds, in very hard baked clay, with the ornament in intaglio, for use in applying the raised decoration upon these goblets. Its surface is curved to that of the vessel. Handles and necks of the plain buff variety show that the articles were chiefly water goblets holding a pint to a quart, while the fragments of the glazed ware indicate very large jars, from a foot to two and a half feet in diameter. The colours of the glaze are blue, green and white, the inside being generally of a lighter tint than the outside.

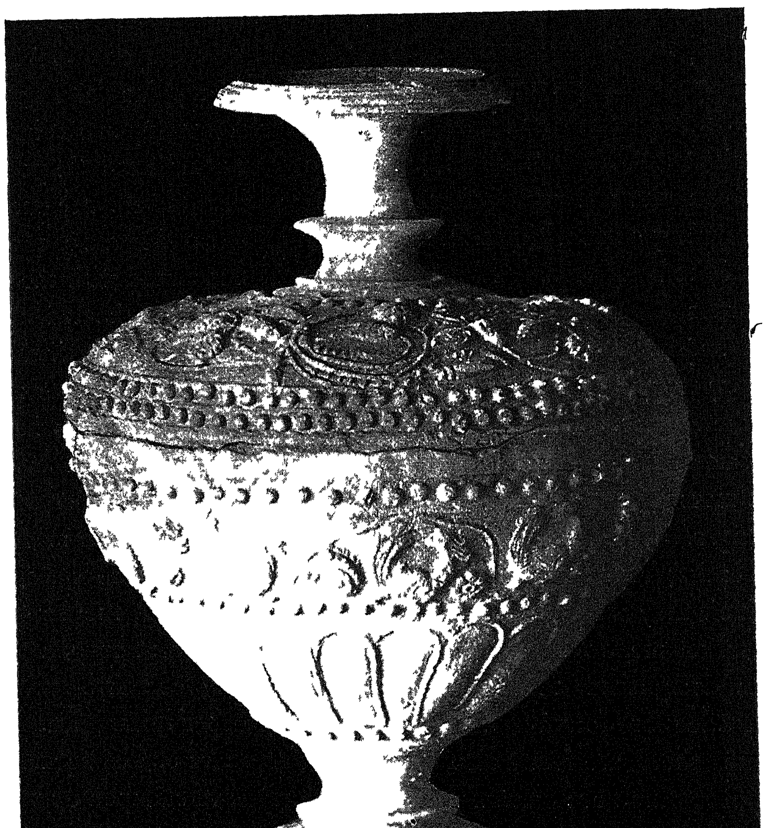


Fig. 4

Both here and at Depar Ghāngro we found abundance of shells of sorts. They are scattered about, some of them very tiny; and in some places large areas are quite white from the quantities crushed and pulverised on the surface. From some of the excavations I got several old Hindu conch shells, some quite decayed, and great quantities of fragments of shell bangles made from these, the shell being cut across in sections and joined together with wire [see Plate XLVIII (*a*)]. Such bangles are still worn, especially by the Brinjāra tribe, the arms of whose women are covered with

BEADS FROM BRĀHMANĀBAD, MANSŪRA, SIND

PLATE XLIX.

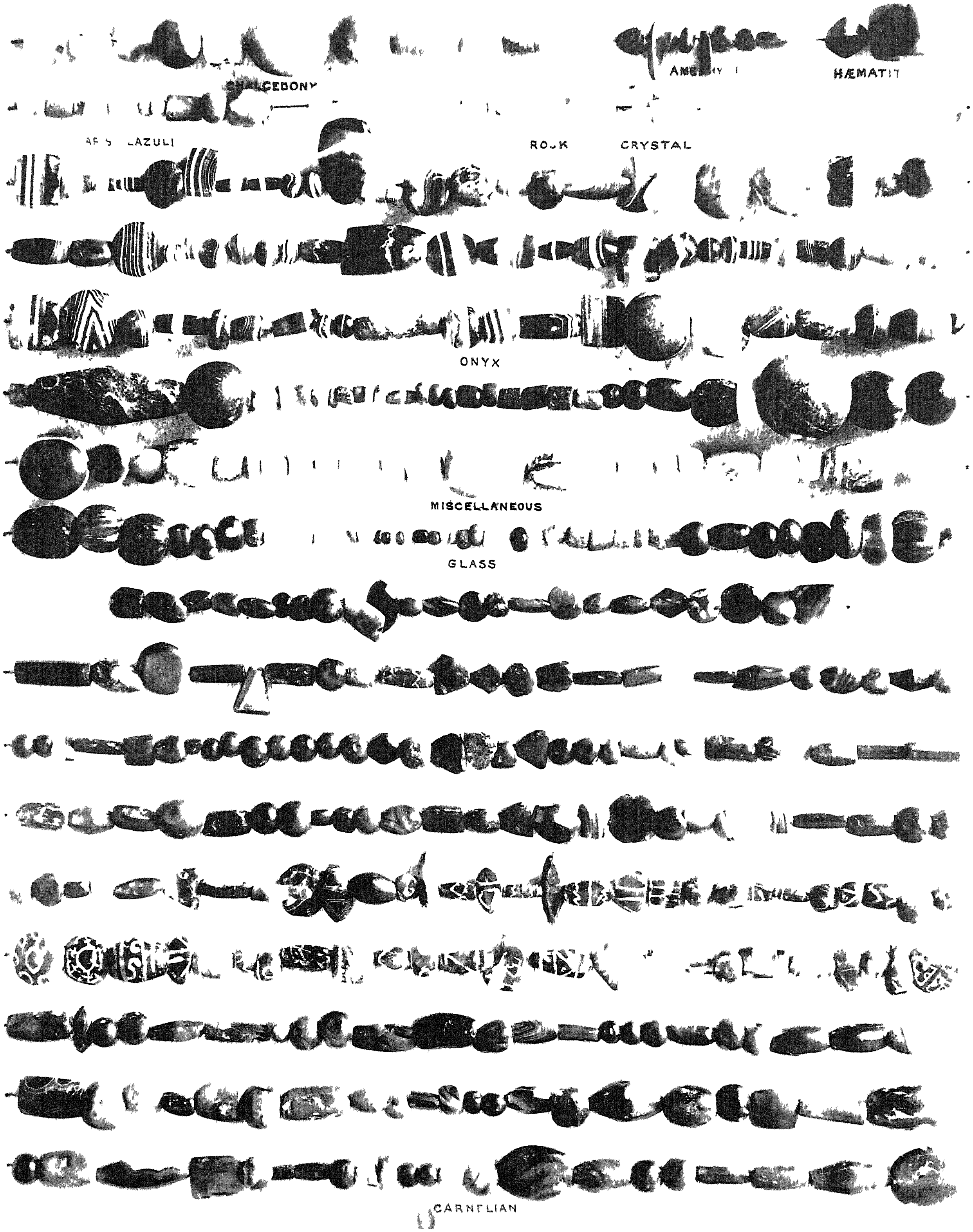
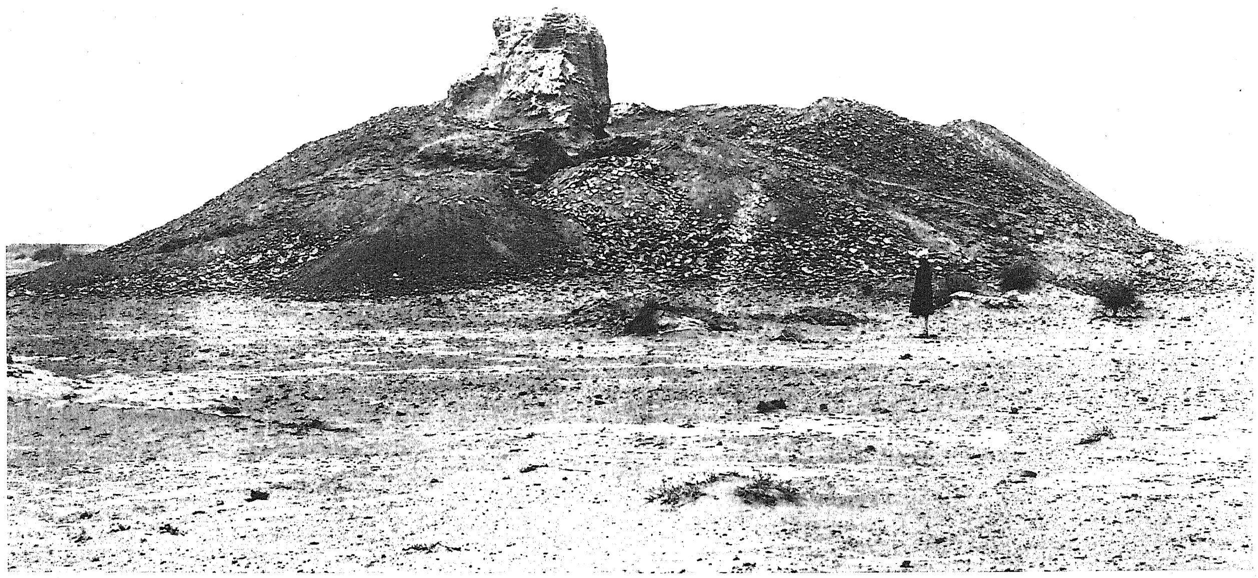


PLATE L.



(*a*) RUINS OF A BUDDHIST STŪPA AT DEPAR GHĀNGRO, NEAR BRĀHMĀNĀBĀD.



(*b*) FRAGMENTS OF TERRA COTTA ORNAMENTS FROM BUDDHIST STŪPA AT DEPAR GHĀNGRO.



(*c*) FRAGMENTS OF TERRA COTTA ORNAMENTS FROM BUDDHIST STŪPA, THŪL MĪR RUKHAN.

them from wrist to elbow. In many cases patterns were incised upon them; and, as they have somewhat the appearance of ivory, Mr. Bellasis mistook them for such. I have several large fragments of these shells, some completely cut away down to the spiral core. Ivory I did find in lumps in a room, which must have been that of an ivory turner, since the pieces are partly turned; but the ivory is more or less disintegrated, whereas the shell seems to have suffered no harm whatever from long years of exposure or burial. Mr. Marshall, in his recent excavations on the old site of Chārsada, found similar fragments of shell bangles.[1]

Beads are found scattered about the ruins, but, excepting in one case, we did not find them in quantities together. In this one case we found about a pound of glass beads, much like the common, old-fashioned English glass bead, made by breaking up glass tubes into short sections. In Plate XLIX, eight of these are seen in the row of glass beads to the right of the centre. They are very much decayed, and have, of course, lost their glazed surface. But more often found than glass are those manufactured from cornelian, chalcedony, amethystine quartz, hæmatite, rock crystal, and onyx, and with these stones each bead had to be cut, polished, and drilled separately. These were made locally, for at Depar Ghāngro we found the site of several lapidaries' houses where we scraped together several baskets full of chips of all these kinds of stones, and among them many undrilled and unfinished beads. They were made of all sizes and shapes, depending entirely upon the size and shape of the rough piece, from an eighth of an inch in diameter to an inch and a half in length—round, flat, oblong, barrel-shaped, and cylindrical. Many of the cornelian beads, which vary in colour from a pinkish straw colour to a deep red, are figured on the surface with some white pigment, which appears to have been burnt in, and cannot be moved by scraping with a pen-knife. The designs drawn are very simple, being, for the most part, plain lines, little circles, or zigzags. No letters or writing appear on any of these, but we found one little cornelian seal with Kūfic or Arabic letters incised upon the surface. Mr. Bellasis also found similar ones, and one with *devanāgarī* letters.

Six miles to the north-east of the great site, usually called Brāhmanābād, and of which I have been writing, is the smaller site of Depar Ghāngro. A glance at the map shows the exceedingly small area that the ruins here cover, and they were measured by me and plotted to scale. The principal ruins, where there have been buildings, are in black, the shaded portions are mostly only covered by brick bats, scattered from the buildings. The great mass of brick and mud masonry, rising above the plain, out of the top of a low mound of brick *débris*, I found to be the remains of a Buddhist *stūpa* [see Plate L (*a*)]. It was built of good, large sized, burnt brick set in mud with a core of sun-dried bricks. I made a cutting down into what I judged to be the centre, but found nothing of intrinsic value; but I was not able, in the short time at my disposal, to do sufficient excavation to be certain of the original plan. But, in my digging, I got several fragments of terra cotta, or brick ornament, similar to that which decorates the pilasters on the Buddhist *thūl* Mir Rukhan, near Daulatpur, sixty miles to the northwest of Depar Ghāngro [see Fig. 5 and Plate L (*b*)], and so exactly like it, that it might have been made by the same hand. The very same moulded or carved brick-work was found by General Cunningham at Shorkot in the Punjab, about sixty miles north-east of

[1] *Annual Report of the Archæological Survey of India*, 1902-03, p. 152.

Multān, and this he likens to the work on Yusufzāi remains.[1] He found letters and writing on the bricks, which he ascribes to the first or second century of our era. I have two fragments from Thūl Mīr Rukhan with parts of letters upon them. General Haig says that Savandi, which I identify with Depar Ghāngro, is mentioned in the legends of the *Mujmalu-t-tawārīkh* as having been built by the King of Kāśmīr during an expedition to Sind. As we know of the sites of other old *stūpas* at Mīrpur Khās and Tando Muhammad Khān, a thorough search through the Punjab might possibly reveal a string

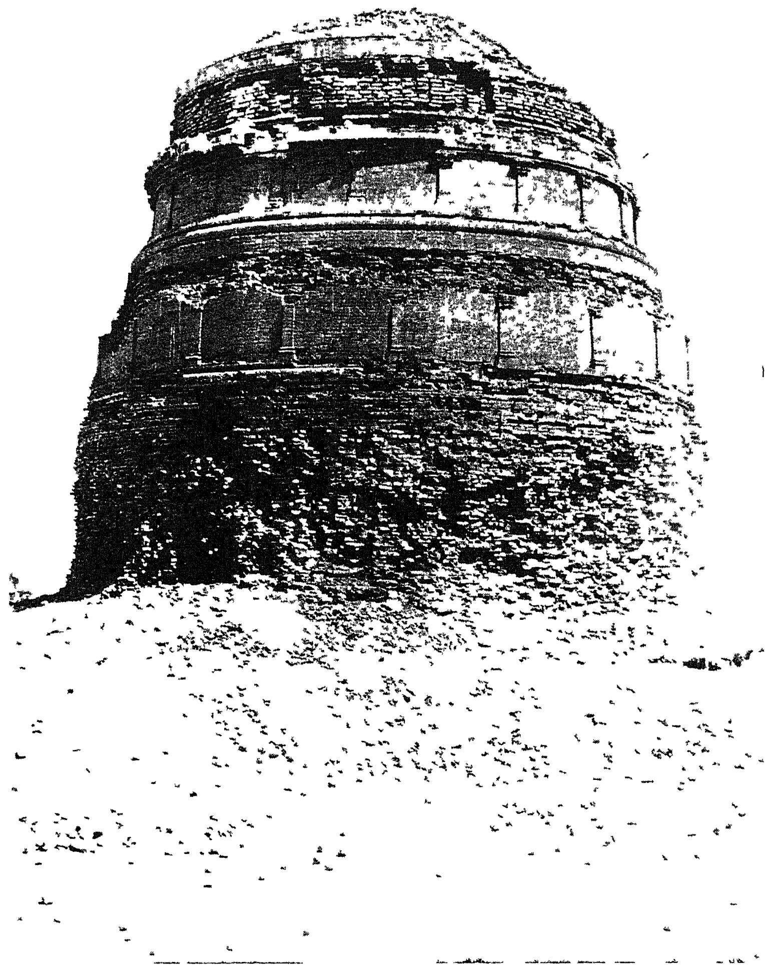


Fig. 5.

of them linking up Sind with Yusufzāi and Kāśmīr. About the middle of the seventh century, so we are told in the *Chach Nāmah,* Chach paid a visit to a Buddhist devotee at a celebrated shrine (*stūpa* ?) *in the vicinity* of Brāhmanābād, when the latter complained that some parts of the structure had, owing to the vicissitudes of time, become ruinous, and asked him to do a good deed by rebuilding them.

What other ruins there are at Depar Ghāngro partake of the nature of those at Brāhmanābād, except that the larger Hindu bricks are not so apparent. Coins, beads, fragments of shell bangles, with fragments of glass, are found about the place. In one spot I found about a basket full of rusted fragments of old swords. Corroded copper

[1] *Archæological Reports,* Vol. V, p. 101, and Plates XXX and XXXI, with which, allowing for very bad drawing, compare the patterns at Depar Ghāngro and Thūl Mīr Rukhan on Plate XL (*b*) and (*c*).

coins and fragments are found lying on the surface in quantities. As will be seen from the map, a number of small buildings lined the river banks for some distance along. The river bed is very clearly marked here, not only by its depression, but by the ruins and scattered broken pottery abruptly ending at the margin on both sides. There are no signs whatever of fortifications, walls, or gates at Depar Ghāngro.

The conclusions I draw from the evidence available, historical and archæological, is that the Arab capital of Mansūra was built upon the ruins of Brāhmanābād, and that the ruins at Depar Ghāngro are those of the Buddhist colony of Savandi. Mr. Bellasis says,[1] after taking it for granted that the great site is that of Brāhmanābād, " Besides Brāhmanābād, at a distance of about a mile and a half[2] is the distinct and ruined city of Dolora, the residence of its last King, and five miles in another direction is the ruined city of Depar, the residence of his prime minister (Wuzeer), and between these cities are the ruins of suburbs extending for miles far and wide into the open country." From various articles which he discovered in his excavations, and, more especially, some carved stone slabs decorated with unmutilated Hindu figures, he contends that Brāhmanābād could never have been occupied by Muhammadans. General Haig[3] identifies the greater site as that of Mansūra, while the ruins at Depar Ghāngro he considers to be those of Brāhmanābād. Historically there is no direct evidence.

That there were at least two cities upon the greater site is evident from the lower and upper walls already referred to That the one was a very ancient Hindu city is clear from the great size of the bricks, which were never used after the advent of the Muhammadans; from the Hindu coins and images, many fragments of the latter having been unearthed by us, and from the historical records that distinctly tell us there was such a large city in the neighbourhood, called Brāhmanābād by the Muhammadans. That the upper city was Muhammadan is shown by the smaller Muhammadan bricks, the three mosques discovered, the abundance of coins with Arabic legends, brick arches, lime plaster on the upper houses, and the earthen pots, with spouts, which I think are distinctly Muhammadan Some of the coins themselves have inscriptions connecting them with the Arab Governors of Mansūra General Haig says " Its name (Brāhmanābād), linked to that of the neighbouring Arab fortress, long survived the ruins of the ancient city, and even at last extinguished the proud title given by the conquerors to their capital. Bahmanah-Mansūrah, in process of time, became Bamanah only, and at this day no native of Sindh has any notion where Mansūrah stood " The bracketing of the names is significant, and is what we might expect where two cities had occupied the same site within so short a period. Brāhmanābād was taken by Muhammad Qāsim in A.D. 712, and Mansūra is said to have been built by his son 'Amrū. The sudden disappearance of Brāhmanābād from history is easily explained by the fact of Mansūra being built upon its ruins. General Haig says " from this time nothing more is heard of Brāhmanābād."

The Chach Nāmah, as translated by Mirza Kalichbeg Fredunbeg (1900), tells us that the small channel of the Halwāī (General Haig's Jalwālī, which, in another place, is spelt Jalwāti) flowed past the east of Brāhmanābād.[4]

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[1] *Journ Bom. Br. R. A. S*, Vol. V, p. 413

[2] It is only half a mile from the edge of one to that of the other.—H C.

[3] *Journ. R. A. S*, Vol. XVI, Part 2

[4] *Indus Delta Country*, p 71.

General Haig says the Arab geographers describe Mansūra as encircled by a channel, or branch, from the Mihran, so as to make the land in which it stood an island, and also that "from somewhere near this point a branch stream issued from the Indus on the left bank, and, flowing south-east, passed round the walls of Manṣūra on the east side, and then, turning south-westward, rejoined the main river at a spot about 3 farsangs, or say 9 miles from the capital;" and, again, "it is the only branch-stream mentioned by the Arab geographers, who in their maps lay down the course of the Indus in Sindh as a straight line, towards the southern end of which a semi-circular loop represents the branch-channel.[1] Another branch-stream in this neighbourhood is mentioned in the Chach Nāmah. This was named the Jalwālī. It ran to the east of *Brāhmanābād*, and apparently close to the town; whether it came from the Indus or the Hākro is uncertain. It may possibly have been the channel that flowed by Mansūra, to which no name is given by the Arab geographers."[2] It certainly was, but how General Haig can think so, I do not know, since he identifies Depar Ghāngro with Brāhmanābād, in which case the stream, to pass on the east of both sites, would need to have doubled up again between them, which is not at all likely. No, the bed shown in the accompanying map, and which is perfectly distinct upon the site, is no doubt that of the Halwāī or Jalwālī. There is also a stream bed, very apparent, passing down on the *west* side of Depar Ghāngro, but I was unable to find any trace of one on the *east* of the same place.

General Haig relied very much, in locating these two cities, upon the movements of Muḥammad Qāsim, the Arab conqueror of Sind. He says[3] "after relating the capture of the fort of Dhalil, the last of the strong places taken by the Arab army before reaching Brāhmanābād, the historian (he is quoting the Chach Nāmah) says: 'some relate that when Dhalil was captured, Muḥammad Kāsim called for Nūbah, son of Dhāran, and after giving him strict injunctions, entrusted to him the charge of the business of the boats, along the bank of the river, from that point to a place called Dūhāti, and from that place to Brāhmanābād there was a space of one farsang.'

"There is no place in the neighbourhood of Brāhmanābād called Dūhāti, but there *is* a township named Dūfāni, and this I have no doubt is the name intended." Then he shows how easily the mistake might have been made by very similar Persian letters being substituted the one for the other. He goes on, "the township of Dūfāni is two miles and a half south-west from Brāhmanābād, and by writers who never employ a fraction this distance would be called a farsang. Now the Arabs were advancing from south to north, and while it would be intelligible that the commander should assign to one of his officers the duty of watching the communication by river up to Dūfāni, if that place were *short* of—that is, south of—Brāhmanābād, it would have been a useless and absurd proceeding on his part if Dūfāni had been some way *beyond* the great fortress, held, as we are told it was, by a strong garrison. Dūfāni is four miles north-west of the place popularly supposed to be the site of Brāhmanābād, but which I believe to be Manṣūrah." But this argument is altogether untenable in view of the fact that the Arab army was *not* proceeding from south to north, but from north

[1] See a reproduction of one of these in the *Journ. Ben. As. Soc.*, No. 1, 1852, p. 49.
[2] *I. D. C.*, 135.
[3] *Journ. R. A. S.*, XVI, Part 2.

to south. He has made the mistake of supposing the fort of Rāwar to be some 70 miles to the south-east of Nerun or Hyderābād, whereas the Chach Nāmah makes it abundantly clear that Rāwar was the present Rohri on the Indus near Sakhar.[1]

Muḥammad Qāsim thus approached Brāhmanābād from the north, his boats proceeding down the stream past Depar Ghāngro, or Savandi, to Dūfāni. The Chach Nāmah tells us he now moved on till he came to the bank of the small channel of Halwāī to the east of Brāhmanābād, and he fixed his camp there, and thence called upon the place to surrender. This spot is shown on the accompanying map as covered with brick *débris* and potsherds. It is here that so many burnt clay balls are found scattered about, used, no doubt, as missiles for their great slings. They measure from six to two inches in diameter. This ground must have been the scene of conflict in many an action; and, if I judge rightly, the principal part of the town and the citadel stood close to the river facing it. Bones are found scattered about, and in one spot I saw the complete bones of an arm and fingers, all entire and embedded in the surface. In another place a quantity of slag iron was found, as if several blacksmiths or iron smelters had been located here. The great jars in the north of the city are found again here embedded in the ground, the rings of their rims just showing above their surface.

Upon either side of the river bed, at Depar Ghāngro, are very extensive areas covered with broken pottery. It is very finely broken, in some places reduced to a fine powder, and is being gradually covered by the sand. There is more of it near Dūfāni, and near Shāh 'Ali Mutalo, some four miles north of Brāhmanābād, along what was probably the course of the stream Halwāī. They are found frequently in Sind, and beside old river beds. These I take to be the sites of larger encampments. When armies were on the march, the universal custom was insisted on that the villages near

[1] See his *Indus Delta Country*, p. 63. The frequent references to Rāwar in the Chach Nāmah leave not the shadow of a doubt as to the locality of Rāwar. Rāwar was the present Rohri, on the Indus, the ruins of Alor, or as it is now called Aror, being about four or five miles to the south. The same work mentions Sīharas as the first King of Alor. He issued from Rāor or Rāwar to attack the Persian invaders (in one manuscript Alor is written for Rāwar, which is more correct, since the Rāwar fort had not been built then). Later, when Dahir was King of Alor, his elder brother Daharsiah seized on Brāhmanābād and made himself independent, and began to overawe his brother. He is said to have completed the fort of Rāwar, which was begun by their father Chach, Dahir submitting to him and promising to hold the fort of Alor as his agent. After Daharsiah's death, Dahir fixed his residence at Brāhmanābād for a year, when he went to Sēwastān (Sewan), and thence to Rāwar. This was, therefore, a northward movement from Brāhmanābād. Amongst the few places in Sind mentioned by the geographer Ibnu Hawqil is Rūr. In describing the course of the Mihrān, he says that, after reaching Multān, it passes the district of Bismud and Rūr, and thence goes on to Manṣūra, subsequently running into the sea to the east of Debal. Now Muḥammad Qāsim's movements, as given in the Chach Nāmah, were in this wise: on arrival in Sind he first took Debal (Thatā ?); then he went to Nerun (Hyderābād), which capitulated; thence to Sēwastān (Sewan); back to Nerun; and from there proceeded against Dahir by marching to the country of Rāwar and Jitor. Dahir was then in his fort of Alor. Muḥammad Qāsim camped over against the fort upon the west or other side of the Mihrān (Indus). He then crossed the river, by the fort of Bet (Bet means an island: probably Bakhar in midstream), and fought a ten or twelve days' battle with Dahir around Alor and Rāwar in the angle between the Mihrān (Indus) and the Dadhāwāh or Wadhāwāh (the Wandanwāh ? which was a name of a portion of the Hākro or Eastern Nārā). Alor was taken and Dahir killed. His son Jesīya and Dahir's queen then shut themselves up in the neighbouring fort of Rāwar, when the former fled to Brāhmanābād, and proceeded to put that place in a state of defence. The queen prepared to defend herself in Rāwar, but the fort fell to the arms of Muhammad Qāsim, who then proceeded against Brāhmanābād, subduing on the way the minor forts of Bahrūr and Dhalīl. His impedimenta was taken up to Rāwar from Nerun by boats on the river Indus, and thence, it would appear, he brought it down by boats towards Brāhmanābād by the Hākro, now known as the Eastern Nārā, and its branch flowing down past the east side of Depar Ghāngro towards Dūfāni.

encampments were to supply both waterpots and carriers. These thousands of pots were never carried on from place to place, but were left where they had been used. The area near Shāh 'Ali Mutalo corresponds with the position of Muḥammad Qāsim's camp when he quitted Brāhmanābād, for, in writing an account of his settlement of that place to Hajjāj, he said that he was writing from his camp higher up the river of Halwāī, near Brāhmanābād. The Chach Nāmah also says that he marched out of Bānbanwāh (Brāhmanābād) on Thursday, the 3rd of the month of Muḥarram of the year 94 (A.D. 712), and alighted at a town called Musthal, in the vicinity of Sawandi and close to a beautiful lake with a pleasant meadow, called Dhandh Wikarbhā, and on the bank of this *dhandh* (lake) he made his camp. There would seem to be some discrepancy here, for he could hardly be encamped both by the river and the lake at the same time, unless we consider that the camp extended from the river eastwards toward the lake, which would bring him, and his own particular camp, nearer to Depar Ghāngro, which I incline to think was Sawandi. In this case Musthal might probably be represented by the modern Mutalo.

I have not consulted Bilādhūri myself, but General Haig says that he states that Manṣūra was built "on this (the west) side of the *buhairah*," and that Mahfūdah was built on the far side of the same. "*Buhairah*," he says, is properly a lake, and he thinks it probable that the lake beside which Muḥammad encamped was the same referred to by Bilādhūri. Before I knew anything of this Mahfūdah I had written the following note: "The detached block, seen on the plan to the south-east of Brāhmanābād or Manṣūra proper, is but a part of the great site, and appears to have been separated from the latter by an artificial tank, whose water was retained by a dam connecting the two groups of ruins, and which seems to have cut off a stream which ran between the two into the main river. This lesser block appears to have had its own engirdling walls, which are seen in several places, especially where they crossed the fields on the east of the site, and are shown on the map by a thick black line across the white ground. This is what Mr. Bellasis calls 'Dolora, the residence of the last king,' Dalur being the present *name* of the adjacent village within whose grounds the ruins lie." This tank must have been nearly half a mile square, and could well be the *buhairah*, and the Dalur ruins Mahfūdah, the fortress built before Manṣūra.

I am hoping to get back to Brāhmanābād this next touring season, when I shall examine the country more minutely between Mutalo and Depar Ghāngro, which I have not yet seen. I had but six weeks there, and it was not long enough to make a thorough examination.

HENRY COUSENS.

ANCIENT RELICS FOUND AT SHWEBO.

TO the north of the Shwebo Cantonments is the Shwebawgyun Pagoda built by King Naungdawgyi (1760-63, A.D.), the eldest son of Alompra, who founded the last dynasty of Burma. At each angle of the platform a small pagoda was built by each of his four queens. Three of these small pagodas are standing, while the fourth, namely, that at the south-western corner, has been removed bodily at some time or other. In December 1902, the central pagoda and the small one to the south-east were dug into by some natives of India, and their treasure-chambers were rifled. The thieves were detected and sentenced to imprisonment. As the two smaller pagodas, which were still left intact, occupied an unsafe position, the Burmese elders of Shwebo decided to open them and remove their contents to a place of safety. The pagoda to the north-east was selected for opening first. The bricks were removed down to the ground level till a stone chamber with a heavy stone lid was uncovered. The chamber is about two feet square, and about a foot in depth, the walls being covered with an inscription in black letters on a gilt ground, which began to curl up and peel off as soon as air was let in. At the bottom of the chamber, covered with dust, were the relics and other objects fixed in a layer of mortar, on which they had apparently been placed, while it was still wet, in order to make them stand up. In the right top corner was a glass pagoda, under which were two or three enclosed boxes, intended for relics, but of which none were found. In the left top corner was a monastery of brass. Next to the pagoda were a number of silver and brass figures of Gautama Buddha, and many representations of the Bodhi tree ; below these were three or four brass guns, and next to these, nearly in the centre of the chamber, was the *sanctum sanctorum*, which consisted of a bowl containing several enclosed boxes with relics. There were also several brass boats with rowers, and a number of *Arhats* or disciples of Buddha, together with the usual votive offerings of gold and silver flowers. Of the objects of religious interest, the most important is the series of enclosed boxes or bowls with lids containing relics. The outer bowl is of brass, the next of copper, the next of silver, the next of pinchbeck, the next of gold set with emeralds, and the innermost of amber. Inside the amber bowl was a small quantity of fine gravel, with a few small pearls and pieces of gold, which a pious Buddhist regards as relics of the body of Buddha. There were silver boxes, one apparently of Maltese work, and another crescent-shaped, a silver candle-holder, and gold and silver scrolls

covered with inscriptions. The secular objects embraced a large number of curiosities illustrating the dresses of the soldiery, the kinds of weapons used, and the various forms of boats and rafts used in the wars between the Burmese and the Talaings. Most of the figures and models are of brass, while some are of copper, and others of silver. There are numerous soldiers engaged in warlike exercises; some, with long coats and three-cornered hats of regulation pattern, are kneeling on one knee taking aim with their rifles; others, differently attired, are practising with lances. Models of guns, too, are in profusion, and many of them are labelled with the inscription "*Mo-hein*" or "Welkin-resounding (weapon)." Among the numerous boats and rafts, the largest in size and the first in interest is a large brass vessel, supposed to represent Alompra on one of his numerous campaigns in the delta of the Irrawaddy. It has three masts, each surmounted by a flag; and there is a figure seated in the stern occupied in steering. A sailor, half as tall as the mast, is climbing up the foremast, and another is standing on the main-mast on the look-out. The Captain is at the bows with a telescope to his eye. If Alompra is on board, he must be below. There are no sails, nor propeller, nor visible means of progression. There are copper elephants with silver ears, horses with riders, dragons, kneeling queens and princesses with pagoda crowns, and also representations of the principal incidents in the life of Gautama Buddha.

Two relic-chambers were found below the north-eastern pagoda. The first was unearthed on the 25th January 1903, and the following are its contents:—

114 silver *Arhats*;
8 gold Buddhas;
4 silver cushions surmounted by silver lions;
1 pagoda with pinnacle of gold, body of glass, and pedestal of silver;
4 smaller gold pagodas;
4 gold vases;
2 gold banners;
2 silver banners;
1 silver house with ornamentation in gold;
1 model representing the Muñcalinda Lake in copper, a *Nāga* in silver; and a bunch of flowers in silver;
4 queens in silver with crowns of gold;
13 men in silver;
1 deer in silver;
1 elephant in silver with two *mahouts*;
1 horse in silver with a rider;
1 couch in silver;
48 trees in copper;
14 frogs in silver;
1 tortoise in crystal;
2 small rings in copper;
1 bunch of flowers in silver weighing $32\frac{7}{8}$ tolas;
1 large casket in silver;
2 small caskets in silver;
1 salver in silver;
12 rubies of different sizes;
1 emerald;
1 broken bunch of flowers in silver weighing $2\frac{3}{8}$ tolas;
60 Buddhas in copper;
24 men in copper;
4 monasteries in copper;
1 *Nāga* in copper;
1 brass spoon;
18 bunches of flowers in brass;
4 war boats in brass;
1 amber bowl.

The second relic-chamber was unearthed on the 20th March 1903, and the following are its contents:—

1 gold scroll;
1 silver scroll;
1 Buddha covered by the hood of a *Nāga* in amber;

3 amber bowls;
4 gold Buddhas;
1 Buddha under the Bodhi tree in amber;
1 gold Buddha under a pagoda, whose top is of gold, body of glass, and pedestal of silver;
2 *Arhats* in gold;
3 Buddhas in silver;
5 Buddhas in amber;
10 *Arhats* in silver;
1 Buddha in a monastery in amber;
8 *Devas* and *Brahmās* in amber;
5 *Arhats*, to whom Buddha first preached his law;
3 bunches of flowers in amber;
1 deer in amber;
4 flower trees in amber;
1 flower tree in glass;
1 *Brahmā* in silver offering a gold flower and an emerald garland to Buddha;
1 pillar in gold;
1 silver pillar crowned with a gold *ti*;
1 silver pillar;
1 silver flagstaff with a gold banner;
1 silver flagstaff with a silver banner;
1 silver flagstaff crowned with a silver *ti*;
6 bunches of flowers in gold;
6 Bodhi trees in silver;
1 *Māra* riding an elephant in silver;
1 silver elephant;
1 silver *Nāga*;
1 silver *Ṛsi*;
1 silver figure of Ciñcamāna, who claimed Gautama Buddha as the father of her unborn child;
2 silver ogres;
1 *Deva* in silver;
1 man in silver;
3 gilt Buddhas in alabaster;
22 Buddhas in copper;
85 *Arhats* in copper;
35 armed soldiers in copper;
4 horses in copper;
5 elephants in copper;
1 *Māra* riding an elephant in copper;
2 monasteries in copper;
2 deer in copper;
1 cushion in silver;
1 model of the Muñcalinda Lake in copper;
2 war boats with armed soldiers in copper;
1 brass raft with Captain and sailors on board;
1 covered passage in brass;
4 brass cannon;
1 copper bowl containing the relics of an *Arhat*;
2 silver caskets of different sizes;
1 gold casket studded with gems containing the relics of an *Arhat*;
1 glass dish with stand ornamented with gold;
1 silver ear-cleaner;
1 silver tooth-pick;
1 pair of silver pincers;
1 pair of gold ear ornaments studded with rubies;
2 pairs of crystal ear ornaments;
1 pair of ivory ear ornaments;
1 amber ear ornament;
30 gold beads;
7 head dresses in gold;
1 oil-lamp in gold;
1 large copper casket containing the relics of an *Arhat*;
6 bunches of flowers in gold;
1 glass goblet.

The following articles were discovered by the thieves in the small pagoda at the south-eastern corner and recovered from them:—

Relics of Buddha;
32 silver *Arhats*;
1 amber Buddha;
3 silver Buddhas (headless);
66 rubies of different sizes;
1 silver casket;
2 silver buttons;
1 crescent shaped silver casket;
1 silver box (without lid);
1 silver spoon;
1 silver spoon (broken);
3 silver banners weighing 9½ tolas;
1 bunch of silver flowers (broken);
1 silver scroll-shaped banner weighing 5⅝ tolas;
1 amber Buddha (headless);

1 small ruby;
Broken pieces of silver weighing 5 tolas;
Broken pieces of gold weighing $1\frac{3}{4}$ tolas;
1 gold flagstaff studded with jewels weighing $4\frac{1}{4}$ tolas;
1 gold scroll with inscription weighing $10\frac{1}{2}$ tolas;
1 silver scroll with inscription weighing 10 tolas;
155 brass figures of *Arhats* and of Gautama Buddha occupying the seven attitudes under the Bodhi tree;
29 brass figures of men;
7 brass models of war-boats, rafts and ships;
7 brass models of monasteries with multiple roofs;
9 silver cushions;
4 brass elephants;
2 brass horses;
2 brass cannon;
16 brass figures of soldiers;
243 silver beads;
1 large brass salver with cover and stand;
1 small do. do.;
1 lidless iron alms-bowl containing the relics of an *Arhat*;
1 large brass bowl;
1 large copper bowl;
1 large pinchbeck bowl;
1 large silver bowl;
1 large gold bowl studded with rubies and covered with a lid containing an emerald;
1 octagonal amber bowl containing the relics of Buddha.

The pagoda at the north-western corner was dismantled on the 25th February 1903, and the following are the contents of its relic-chamber:—

1 gilt Buddha made of the wood of a *Bodhi* tree (*ficus religiosa*);
2 amber Buddhas;
28 silver Buddhas with *Bodhi* trees;
7 silver Buddhas;
4 silver Buddhas (standing);
1 silver Buddha in a shrine;
1 silver Buddha attended by a *Nāga* under a tree;
10 human figures in silver;
1 glass goblet still filled with water;
1 silver scroll on which an extract from the Buddhist scriptures is inscribed;
1 glass jug with a porcelain cover containing a small ingot of silver;
1 pair of gold ear ornaments studded with jewels;
1 diamond ring;
1 jade-stone ring;
1 sapphire;
2 rubies;
1 gold ear ornament (filigree work);
1 emerald ring;
1 bunch of gold flowers (broken);
2 bunches of silver flowers;
1 large gold bowl containing relics;
1 small gold bowl containing 3 relics;
1 silver *chunam* box;
1 silver bowl;
1 amber *Haṁsa* bird (headless);
1 small silver bowl;
1 small garland of emeralds;
1 ruby (dark coloured);
1 bundle containing a gold necklace, and some rubies, jade-stone, and emeralds;
1 gold chain (broken);
1 glass goblet containing relics;
2 silver footprints of Buddha or Buddha-pād weighing 10 viss;
1 gold ring.

On the gold scrolls are found engraved extracts from the three divisions of the Buddhist Canon, and the silver scrolls are mainly of historical interest. Three of the latter are translated below:—

I.

In the 2297th year of the era of the Religion and the 1115th year of the Burmese era (1753 A.D.), Alompra, the Patron of Buddhism, founded the City of

Ratanāsiṅgha, and reigned there as King. The boundaries of His Majesty's empire are as follows:—

North—Assam and Khamti;

East—The iron bridge (Tieh-pi-kuan) on the Chinese frontier;

South-east—Siam;

South—Rangoon, Syriam, and the sea.

His Majesty founded a new dynasty, and built a large pagoda to the north-east of the capital. In the month of *Kason*, 1122 of the Burmese era (May 1760 A.D.), he died at Kinywa in the Martaban district, on his return from the invasion of Siam. His eldest son, Sīripavaramahādhammarājādhipati, succeeded to the throne. The pagoda, which was built by Alompra, was in a state of disrepair, and was restored by the Dowager-Queen, who enshrined additional relics in the upper relic-chamber. Her Majesty likewise had the first books of the three divisions of the Buddhist Canon inscribed on scrolls of silver and gold, and these were enshrined in the same pagoda in the month of *Nattaw* 1125 (December 1763 A.D.), that is to say, after her second son had become King.

II.

The empire of Ava, which was under the sway of the ten kings of the Nyaungyan dynasty, was overthrown in Tagu 1113 (April 1751 A.D.), and Alompra became King in 1115 (1753 A.D.), after founding a new capital called Ratanāsiṅgha at Moksobo. In 1121 (1759 A.D.) His Majesty invaded Siam, and, on his return, died at Kinywa in the district of Martaban. The eldest son, Sīrisudhammarājā, who was heir-apparent, succeeded to the throne in *Nayon* (June 1760 A.D.). The boundaries of the Burmese Empire are as follows:—

South—Pegu, Syriam, and the sea;

North—Khamti and the sea (?);

West—The hill ranges separating Burma from Assam, Chittagong and Arakan;

East—China and Siam.

White and red elephants were presented to the King, who then assumed the title of "Sīripavarasudhammarājādhipati." His Majesty built a large pagoda at Shwebawgyun, which is 500 *tas* (5,250 feet) to the north-east of the capital; and each of the four queens built a smaller shrine at each corner of the pagoda platform. The small pagoda at the north-eastern corner was built by Queen Thayetmyoza Sīrimahādevī. Relics of the Lord Buddha were placed in a bejewelled casket and enshrined in the pagoda. The following were also deposited in the relic-chamber: bejewelled representations in gold, silver, and pinchbeck, of the Royal builder, of the seven Attitudes of Buddha around the Bodhi Tree, of Buddha preaching his first sermon to the *Pañcavaggīya* monks at the entreaty of *Sahampati Brahmā* under the *Ajapāla* Tree, and of the Twenty-eight Buddhas, who preceded Gautama Buddha, etc.; models of umbrellas, banners, elephants, rafts and war-boats; betel-boxes, flower vases, small beads, bunches of flowers, and lamps, made of gold, silver, brass, and iron, and ornamented with rubies, sapphires, amethysts, pearls, diamonds, cats'-eyes, coral, crystal, and glass. Her Majesty, who is imbued with great faith in the Religion, prays:

"May the guardian spirits of the Religion, of the World, of the earth, and trees and pagodas, keep watch and ward over my work of merit, in order that it may last for

5,000 years, that is to say, as long as Buddhism itself. May these good and noble spirits share in my merit. Should wicked and avaricious persons approach the precincts of my pagoda with the intention of robbing it of its valuable contents, may the guardian spirits, through the glory of my Lord and Husband, and my own merit, instil fear into them and succeed in thwarting their nefarious designs."

On Tuesday, the 13th day of the waning moon of *Thadingyut* 1125 (October 1763 A.D.), great offerings were made to a large number of monks, and the relic-chamber was closed. The queen continues her asseveration: "May the god of earth bear witness to this my good deed. Till I enter *Nirvāṇa*, may all my wishes be fulfilled. In virtue of the merit acquired by me, may His Majesty, the Dowager-Queen, and the members of the Royal Family live in mutual love, may their lives be prolonged over a hundred years, and may all their wishes be fulfilled. May I share my merit equally with my parents, to whom I am under a deep obligation. May my eldest son, who would have shed lustre and glory on our Royal House, had his life been prolonged, also share in my merit, and may he while in the enjoyment of heavenly bliss, rejoice on hearing of this my good deed. May the Ministers and other officials, who supervised the building of my pagoda as well as all beings, who are in course of transmigration in the thirty-one forms of existence, participate in my merit. May the spirits of the pagodas, trees, the earth and the sky, together with the ogres, *ghouls* and ghosts, who inhabit the declivities of the earth, enjoy my merit, and keep constant watch and ward over my pagoda. Finally, by virtue of the merit acquired by me through building this pagoda, in which the relics of Buddha are enshrined, may I enjoy such happiness and prosperity as cannot be disturbed and detracted in every form of existence counting from the present one till the attainment of *Nirvāṇa*, and, like Visākhā and Queen Anoja, may I attain *Nirvāṇa*, without the necessity of further transmigration, at the feet of the coming Buddha Ari Metteyya."

III.

In the month of Tagu of the 2295th year of the era of the Religion and the 1113th year of the Burmese era (April 1751 A.D.), the empire of Ava, which had been under the sway of the ten kings of the Nyaungyan dynasty, was subverted, and Alompra, the Patron of Buddhism, revived the line of Burmese kings, and re-established the centre of Buddhist influence, by founding the city of Ratanāsiṅgha, with its palace, moat, and walls, at Moksobo, where the Shwetaza pagoda still commemorates the dwelling-place of Buddha, when he was born as a white stag. His Majesty ascended the throne in the 2297th year of the era of the Religion and the 1115th year of the Burmese era (1753 A.D.). The founder of the new dynasty died in *Kason* 1121 (June 1759). The eldest prince, Sīrisudhammarājā, who was the heir-apparent, succeeded to the throne. White and red elephants were presented to him, and he assumed the titles of "Lord of White and Red Elephants, Sīripavaramahāsudhammarājādhipati." The boundaries of His Majesty's Empire are as follows:—

South—The sea;

West—The hill ranges separating Burma from Arakan, Chittagong and Assam;

North—The tracts inhabited by the Shans and the Kachins.

At Shwebawgyun, which is about 500 *tas* (5,250 feet) to the north-east of the royal

city, His Majesty built a pagoda, in which the relics and images of Buddha were enshrined. The relics consisted of 3,001 large pieces, 3,001 small pieces and 5,003 smaller pieces, which were deposited in concentric bowls of brass, copper, pinchbeck, pewter, coral, gems, rubies and *thayetkan* wood. In the relic-chambers, of which there were several, were deposited golden figures representing Alompra and his chief queen, His Majesty and his chief and other queens in an attitude of offering flowers, parched rice, lights and banners to Buddha; Alompra's regalia and his turban, ruby ring, emerald bracelets, betel boxes, gold sword, chains, girdle, and many crown jewels; relics of Buddha placed in concentric bowls of silver, gold and rubies; figures of Buddha representing the principal incidents of his life and figures of the members of the royal family, and of soldiers, elephants, horses, boats, ships, rafts and of many kinds of weapons. His Majesty built a *zayat* (rest house) adorned with exquisite carving. The *tí* on the pagoda was made of iron weighing 400 viss, and the bell was made of brass. Silver figures were made representing the scenes in the 550 *Jātaka* stories. The entire *Tripitaka* was inscribed on gold scrolls.

The above is an enumeration of the good works of His Majesty, the Lord of White and Red Elephants.

The small pagoda at the north-eastern corner of the Central pagoda was built by Queen Sīrimahāratanādevī on Sunday, the 4th day of the waxing moon of *Tawthalin* in the 2307th year of the era of the Religion and the 1125th year of the Burmese era (September 1763 A.D.). The following were deposited in the relic-chamber:—

Buddha's relics placed in concentric bowls of brass, silver, pinchbeck, gold and amber; Buddha's relics consisting of 3,001 large pieces, 3,001 small pieces and . . . . smaller pieces, placed in an amber bowl of great value, which was put inside a miniature pagoda, whose bejewelled pedestal was of silver, whose body was of glass, and whose pinnacle was of gold; gold images of Buddha studded with jewels, representing him in the seven attitudes around the Bodhi Tree; similar images in amber; a gold figure studded with jewels representing Buddha preaching his first sermon in the *Migadāya* or Deer Park; silver figures representing the *Pañcavaggīya* Monks listening to the first sermon of Buddha; silver figures of 80 disciples of Buddha; an amber pagoda; the teaching of Buddha inscribed on gold and silver scrolls; the bejewelled shroud used in covering Alompra's body when it was lying in state; His Majesty's turban and comb; a gold ring of inestimable value; Her Majesty's head dress, hairpin, ear-ornament, ring . . . ; a pair of brass ships in miniature manned each by a Captain, steersman, and sailor, filled with gold, silver, and precious stones; a brass boat filled with sapphires, emeralds, coral, crystal, and glass; brass war-boats and rafts manned by sailing-masters, steersmen, and crews of rowers; gold figures of queens in their full dresses adoring Buddha with offerings of gold, silver, and jewels; . . . ; pagodas in miniature made of gold, rubies, and amber; betel-boxes; figures in gold, silver, and brass representing the king, queens, ministers, and all officials and menials in an attitude of adoring Buddha's relics and of offering them bunches of gold, silver, ruby, and pearl flowers; bunches of gold, silver, ruby, and pearl flowers; offerings of parched rice represented by beads of gold, silver, pearls and rubies; gold and silver banners, gold and silver lamps, with and without stands; fragrant essences of various kinds; at the four

points of the compass as well as at the intermediate points, figures in silver and brass, of elephants, horses, and soldiers armed with swords, spears, guns, bows and arrows, and facing outwards for the purpose of safeguarding the dedicated treasures in the relic-chamber; and figures of armed men and infantry soldiers were interspersed between those of elephants and horses.

"In the future, if my pagoda is destroyed by wicked persons or natural causes, may the guardian spirits of the Religion, of pagodas, of the universe, of trees and of the earth, safeguard, on my behalf, the holy relics and images of Buddha, the miniature pagodas, and the sacred figures mentioned above."

These scrolls describe the contents of relic-chambers constructed in 1763 A.D. Thirty-four years later, Hiram Cox, British Resident at Rangoon, visited the Mingun pagoda, which was in course of building by Bodawpaya, the third son of Alompra, and saw the relic-chamber and the treasures to be deposited in it. The following is his description:—

"Upon the seventh terrace rises the exposed part of the base or plinth of the intended structure, the foundation of which is sunk of solid masonry still lower; how much I have not been able to ascertain. Within the plinth a hollow chamber is left, forming a quadrangle whose extent is sixty-one feet six inches, its depth eleven feet, and the walls being twelve feet eleven inches thick, make the exterior surface of eighty-seven feet four inches. The interior of this chamber is plastered with white *chunam* and decorated with painted borders and panelled compartments with trees and flower-pots in them. There are also rows of columns twenty-nine inches square, and pilasters, to support the leaden beams and terrace with which the whole is to be covered when the dedicated treasures are deposited there; with a number of quadrangular compartments large and small, from ten feet to four feet five inches square, to contain them; the smaller ones being lined with plates of lead three-fourths of an inch thick. The innermost quadrangles are intended for the preservation of the treasures dedicated by His Majesty, while the span around them is devoted to the oblations of his courtiers. Opposite each of the smaller compartments, whose depth is equal to that of the larger ones, and which appeared like so many wells, was placed, on small Bengal carpets, little hollow temples, three feet square, with pyramidal roofs ornamented in the Burmhan style; the interior frame being of painted wood covered with thin plates of silver, alloyed to about fifty per cent. standard; in height from the base to the pinnacle seven feet, the eaves ornamented with strings of red coral, about six beads in each, terminated with heart-shaped pieces of common window-glass. Round the solid part of the building and upon the terrace, were arranged piles of leaden beams, about five inches square, and of sufficient length to cover the respective chambers, with plates of lead of the same length fourteen inches broad, and three-fourths of an inch thick for the coverings; and besides these, a number of slates of a schistous granite were arranged in readiness to cover the whole. We were told that there was another set of chambers of the same dimensions and structure, charged with treasure, below these; how sure this is I cannot pretend to determine. The invention of lining the chambers with lead for the preservation of the treasures, is an honour claimed by his present Majesty, who has great skill in these matters. That the design has a divine sanction we had ocular demonstration, three piles of leaden plates gilt

with gold-leaf being shown us, which had been brought and arranged where we saw them at night by angels.

* * * * * * *

"A number were collected for our amusement; we sat to see them for about half an hour, and then went to view the dedicated treasures. They were arranged on the platform of a bamboo shade, about seventy feet in length and thirty broad; they consisted of a great variety of Burmhan temples and *keouns* (monasteries) in miniature, covered with plates of fifty per cent silver, and filled with little images of their idols from three inches to a foot in height of the same materials. Besides those in the temples, etc, there were squadrons of others of the same kind and quality arranged on the floor; also many which they said were of solid gold, but on examination we found them less valuable; there were also two rows of about a dozen larger images of alabaster, from four to two feet in height, well gilt and burnished. These were of that remarkable kind which I have before noticed in this diary; their cast of features and hair being precisely that of the Abyssinian negroes; all the others were of Indian origin (but I shall have occasion to discuss this subject more at large in another place). There were also several gilt metal flat caskets, said to contain gold and precious stones; Mr. Burnett saw the contents of two or three, though I did not; in them were several coloured stones, none above ten or fifteen carats weight, set in gilt foil. There were also several piles of bricks, slabs of coloured glass, and white *chattahs* (umbrellas), such as are used by the royal family; and lastly, one of Dr. Priestley's machines for impregnating water with fixed air. On the opposite side, in another shade, was an image of a deity in a portable temple, with poles fixed to it for four bearers, which, we were informed, were sufficient when its godship was in good humour, but when displeased, not all the power of the Burmhan empire could move it. Many miraculous cures are ascribed to the power of this deity; in pity to the multitude, it is, therefore, hoped that His Majesty will not immure it in the vaults of the new temple. In a separate shade, in a moveable wooden-house which travels on wheels, is a print of the foot of Gaudama, in a slab of marble, from the heel to the toe. It is about three feet in length and of a proportional breadth; but the history of this impression I did not learn, as my conductors were in haste to go home." [1]

* * * * * * *

Naungdawgyi, the king, who built the Shwebawgyun Pagoda at Shwebo, reigned from 1760 to 1763 A.D. Being the eldest son of Alompra, he materially assisted his father in overthrowing the power of the Talaings, in uniting the whole of Burma under one rule, and in founding the last Burmese dynasty, which was subverted by the British in 1885 A.D. Ava was conquered by the Talaings in 1752 A.D.; Alompra proclaimed himself king in the following year; and thus, for nearly ten years, Naungdawgyi was engaged in incessant fighting. In these wars, the belligerents were still armed with bows and arrows, and fire-arms decided the fate of battles. These weapons were supplied by the agents of the English and French East India Companies, which, having made peace after an open war of 5 years in the Carnatic, transferred their rival aspirations to Burmese soil. The French had a factory at Syriam, and the

[1] *Journal of a Residence in the Burman Empire.* pages 106—111.

British established themselves at Negrais and Bassein. The prescience of the latter in selecting the winning side in all disputes among native rulers in India and Burma, and in the East generally, is truly remarkable They supported the pretensions of Alompra, who was an upstart of no royal lineage, against the claims of the king of Pegu, who had unlimited resources at his disposal; and, in the end, they were quite justified in their choice

In 1755 A D the British East India Company presented Alompra with "4 pieces of Iron Cannon, one a 12, and the other three 9 pounders; 80 shot and 4 chests of Powder,"[1] and two years later the king was presented by the Company with more guns and powder Moreover, in the Treaty of "Friendship and Alliance," concluded, in the same year, by the Company and the king, the 6th Article stipulates that—"In consideration whereof, the said Honourable Company do hereby promise and oblige themselves to present unto the king of Ava and Pegu, annually, one piece of Ordnance to carry a twelve pound shot, as likewise 200 viss of good gunpowder * * * * *"[2] Again, in 1760 A D, Naungdawgyi, the successor of Alompra, was still in need of fire-arms, and he sought the assistance of the Governor of Madras in procuring them.[3]

These historical circumstances explain the presence, so antagonistic to the spirit of peace inculcated by Buddhism, of figures representing fighting men, and of models of cannon and other paraphernalia of war The figures were not placed there as mere historical mementoes: they were supposed to serve a practical purpose, namely, to safeguard the holy relics of Buddha and other treasures. The Burmans believed, as explained in the concluding part of the third scroll translated above, that these figures of elephants, horses, and armed soldiers, would become endowed with life and motion and that the soldiers would make use of the cannon, muskets, swords, spears, bows and arrows against any intruders, who might approach the sacred precincts of the pagoda with an evil intent.

A representative selection was made from the relics found at the Shwebawgyun Pagoda, and was photographed in four groups Plate LI shows the twenty-eight Buddhas including Gautama The Buddhist Scriptures declare that Buddhas in the bygone ages were as numerous as the "Sands of the Ganges," but recognize only the last twenty-eight. If time is computed by means of world-cycles, this number may be reduced to four, namely, Kakusandha, Konāgamana, Kassapa, and Gautama; and to this quartette may be added Metteyya, the future Messiah of Buddhism. These five Buddhas belong to what is known as the "Bhadda-kappa" or the "Happy world-cycle" The Chinese Buddhists, with their practical common sense, have reduced the number still further. They adore only three Buddhas: the Past one, Kassapa; the Present one, Gautama; and the Future one, Metteyya.

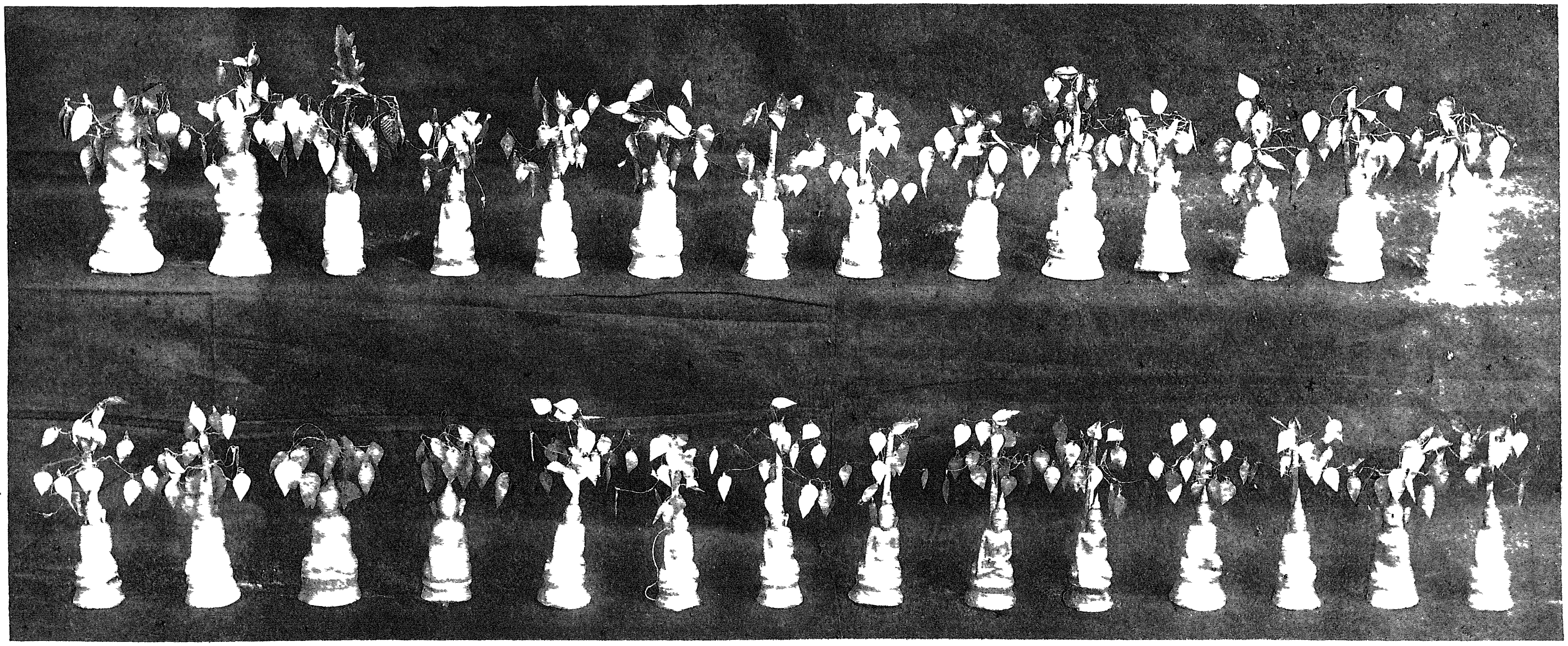
Like Confucius, Gautama never claimed a higher title than a "Transmitter of Tradition;" and in his sermons, he delighted to call himself a "Tathāgata," which Childers has translated as "one who goes in like manner," but which is understood by Buddhists to mean "one who follows in the foot-steps of his predecessors." The body of doctrine now known as Buddhism was not created by him, but merely rediscovered after the lapse of ages.

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[1] *Dalrymple's Oriental Repertory*, page 143. [2] *Ibid.*, page 225. [3] *Ibid*, page 395.

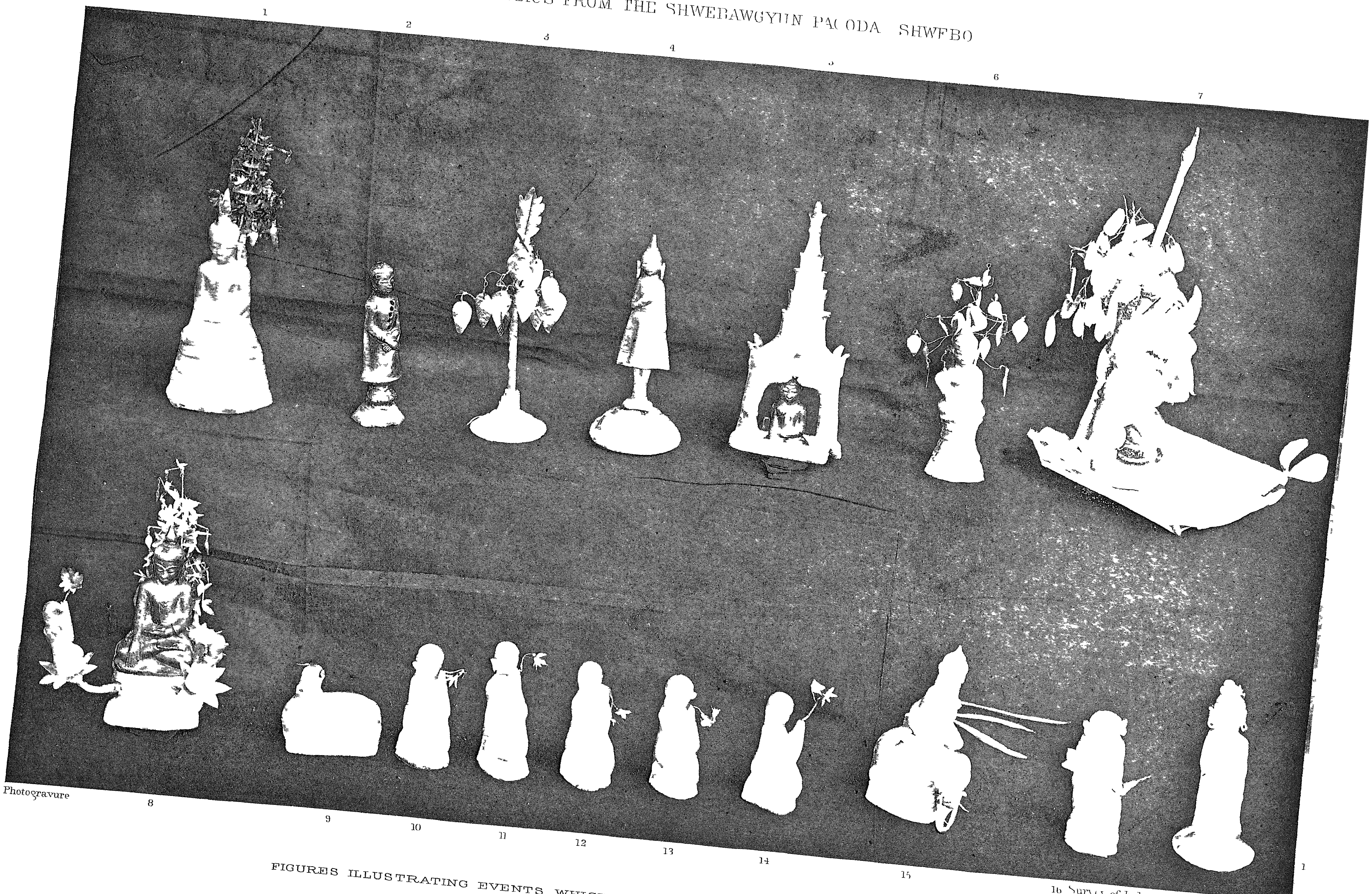
PLATE LI.

RELICS FROM THE SHWEBAWGYUN PAGODA SHWEBO



THE TWENTY EIGHT BUDDHAS WHO PRECEDED GOTAMA

RELICS FROM THE SHWEBAWGYUN PAGODA SHWEBO



Photogravure

FIGURES ILLUSTRATING EVENTS WHICH FOLLOWED THE ATTAINMENT OF BUDDHAHOOD

Survey of India Offices Calcutta June 1905

1

It will be noticed that each Buddha sits cross-legged under a Bodhi Tree, or a "Tree of Knowledge, or Enlightenment." Gautama attained Buddhahood under a *Ficus Religiosa*, while each of his predecessors had a tree of a distinct denomination, as the sandal wood, bamboo, *Sāl* (*shorea robusta*), etc., trees. The idea that a Buddha should attain to the state, practically, of the highest type of humanity, under a tree of a particular denomination, is probably connected with the primitive form of Tree-Worship, according to which every tree of gigantic proportions was believed to be the abode of some spirit or Deity.

Plate LII portrays the events which happened immediately after the attainment of Buddhahood by Gautama. According to the Mahāvagga (*vide* foot-note 2, pages 74-75, *Sacred Books of the East*, Vol. XIII), the Sage remained for a period of four times seven days in the neighbourhood of the Bodhi Tree; but later tradition is unanimous in extending it to seven times seven days, and the Buddhists of Burma have accepted the latter authority. The first figure on the extreme left of the upper row represents Gautama Buddha as "enjoying the bliss of emancipation" under the Bodhi Tree. At the end of seven days, he rose from his sitting posture, and contemplated the Tree of Knowledge (figures 2 and 3). At the end of the second period of seven days, he felt the effects of inaction, and took walking exercise for seven days (figure 4). Then the gods provided him with a golden house resplendent with precious gems, in which he sat for seven days, working out his laws of salvation (figure 5). After this, he sat down under the Ajapāla banyan tree (banyan tree of the goat-herds), (figure 6). Here, he conversed with a Brahman of a haughty disposition, and successfully withstood the assault by the hosts of Māra, or the Tempter. The next attitude of Buddha (figure 7) is best explained in the words of Rhys Davids (page 80, *ibid.*):

"Then the Blessed One, at the end of those seven days, arose from that state of meditation, and went from the foot of the Ajapāla banyan tree to the Mucalinda tree. And when he had reached it, he sat cross-legged at the foot of the Mucalinda tree uninterruptedly during seven days, enjoying the bliss of emancipation. At that time, a great cloud appeared out of season, rainy weather which lasted seven days, cold weather, storms, and darkness. And the Nāga (or Serpent) King Mucalinda came out from his abode, and seven times encircled the body of the Blessed One with his windings, and kept extending his large hood over the Blessed One's head, thinking to himself: 'May no coldness (touch) the Blessed One. May no heat (touch) the Blessed One! May no vexation by gadflies and gnats, by storms, and sunheat and reptiles (touch) the Blessed One!'"

The first figure on the extreme left of the lower row represents the scene which took place under the Rājāyatana tree. Here, Tapussa and Bhallika, two merchants from Ukkala (Orissa), presented Gautama with lotus-flowers, rice-cakes and lumps of honey. It is interesting to note that Burmese writers identify Ukkala with Rangoon. Figure 9 is a deer representing Migādaya, the Deer Park near Benares, where Gautama Buddha preached his first sermon, which is described in Buddhist phraseology as "Turning the Wheel of the Law;" and figures 10-14 represent his first audience of five hermits who were converted. The last three figures 15, 16 and 17, represent three of the principal enemies of Buddha. Figure 15 is the six-armed Māra riding a fierce elephant, which is in the act of charging against Gautama with its

tusks. Figure 9 is Āḷāvaka, an ogre, who attempted to harm Buddha, but who was ultimately converted. Figure 10 represents a woman, to whom a curious history is attached. In the Buddhist Church, incontinence *ipso facto* invalidates monasticism; and this woman, Ciñcamāṇavika by name, who was set up by the enemies of Buddha, stuffed herself up with pieces of cloth and bark, and accused him of being the father of her unborn child.

Plate LIII contains figures, which are thoroughly Burmese in their character. In the upper row are two inscribed scrolls, the first being made of silver, and the second of gold. Their translation has been set forth above. They are followed by nine human figures in some form of attitude of adoration. No. 3 is a Burmese official, the next a Manipurian lady, whose head dress is surmounted by a serpent, the fifth and sixth are Ministers of the highest rank, the seventh and eighth are the King and his Chief Queen, and No. 9 is a Buddhist Monk, whose head dress resembles that of the Tibetan *lamas* of the present day. Such style of head dress was discarded in Burma during the reign of Bodawpaya (1781-1819). The tenth appears to be a Prince of Manipur, whose body is entwined by two serpents, and the eleventh to be a Burmese Prince of the Blood carrying a heap of golden flowers. The last two figures are models of silver boxes.

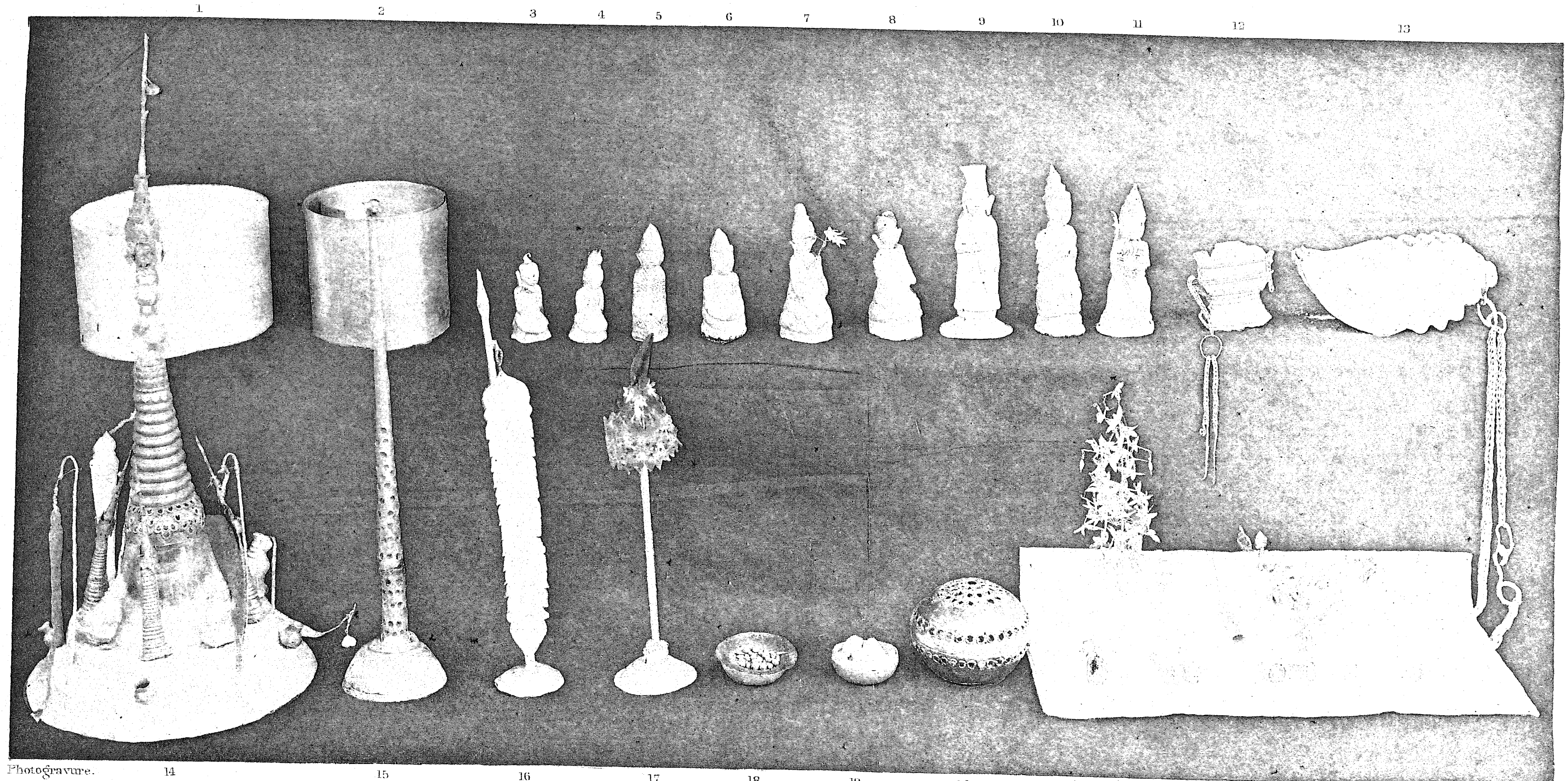
The miniature pagoda on the extreme left of the second row may be identified with the one referred to in the following extract from the translation of Scroll No. III:—

"Buddha's relics consisting of 3,001 large pieces, 3,001 small pieces, and * * smaller pieces, placed in an amber bowl of great value, which was put inside a miniature pagoda, whose bejewelled pedestal was of silver, whose body was of glass, and whose pinnacle was of gold." The pagoda is surrounded by the customary paraphernalia. On the pedestal are two *lotah*-shaped flower vases, three smaller pagodas, leogryphs, and streamers. Figure 15 is a gold flagstaff surmounted by a valuable ruby; 16 is a silver streamer hanging from a silver flagstaff; and 17 is a gold *ti* or umbrella, which is one of the emblems of Sovereignty. The three bowls (figures 18-20) are relic bowls. The first is said to contain the relics of Gautama Buddha, and the second those of his disciples. The relics look like small pebbles and grains of iron pyrites rather than the calcined bones of human beings. The third is of gold and forms one of a series of concentric bowls. The above are followed by a group of ornaments placed in two lines. In the first line a cylindrical gold ornament, which is the pinnacle of a Burmese Crown, is flanked by bunches of flowers in gold. In the second line are arranged the following, commencing with the left: a gold ring for keeping together on the crown of the head the hair of a young Burmese girl; two pairs of gold ear cylinders ornamented with rubies and pearls; and two gold finger-rings on one of which is engraved the effigy of a king of some European State.

Plate LIV is a contribution to the military and naval history of a period which was unaffected by steam, electricity, or Krupp guns. Fire-arms had been introduced into Burma by the Portuguese, French, and British; but their use had not become extended, and their happy possessors were the arbiters of the destiny of nascent nationalities. The supremacy of Alompra, who founded the last dynasty of Burma in 1753, could only be ascribed to his possession of several pieces of ordnance, two of

PLATE LIII.

RELICS FROM THE SHWEBAWGYUN PAGODA: SHWEBO.

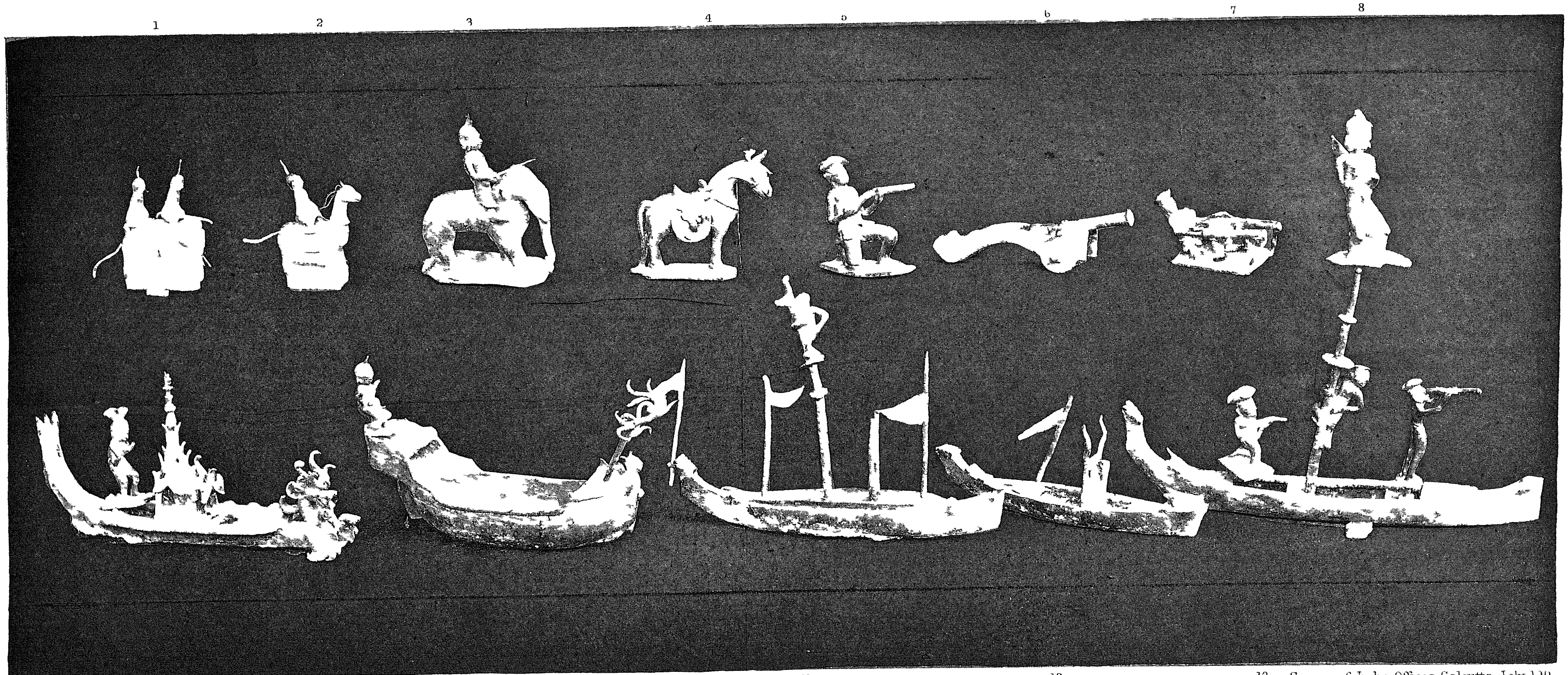


Photogravure.

Survey of India Offices, Calcutta, May 1905.

SACRED RELICS AND SYMBOLS.

RELICS FROM THE SHWEBAWGYUN PAGODA SHWEBO



Photogravure

Survey of India Offices Calcutta

MODELS OF MILITARY AND NAVAL FORCES

which he felicitously named the "Thunderer" and the "Conqueror of Pegu." The cannon owned by Naungdawgyi, his son and successor, was called the "Vanquisher," and its model with its name engraved on the barrel appears as figure 6. Figure 8 is armed with a heavy wood-cutter's knife, and appears to be a member of a corps of sappers and miners, while No. 7 is an artilleryman in charge of two howitzers. The fifth is an infantry soldier armed with a blunderbuss, whose three-cornered hat bespeaks his European nationality. The fourth is a richly caparisoned cavalry horse and the third a war elephant, whose rider is armed with a spear: while the first two represent an officer of an elephant corps and a cavalry officer. Before the introduction of gunpowder, when bows and arrows had not been superseded by fire-arms, elephants were extensively used as riding animals in warfare both in India and Indo-China. They were often made intoxicated, and directed to trample down one's enemies or to batter down with their colossal heads city gates and other obstacles.

In the lower row is a flotilla of five war vessels. The ninth is the flag-boat of the King. Its prow is embellished with the head of a dragon, which is the national emblem of China. In its middle rises the graceful spire of a gilt pavilion with five pyramidal roofs, under which the King sits; and a hat-wearing officer is on sentry-go behind the pavilion. The stern of the boat is bent like a bow, and is ornamented with rich carving. A pageant of a Burmese king, like that of other Oriental rulers, is rich in scenic effects, and words fail to produce the impression made upon one's mind and imagination. The tenth is reserved for members of the Royal Family. No. 11 is a sentry boat with a look-out man on the mast. No. 12 has a banner flying and musket rest. The last is manned by three Europeans; the Captain is looking through a telescope, a sailor is climbing the mast, and a musketeer at the stern, who wears a hat, is protecting the other two with his gun.

TAW SEIN KO.

PREHISTORIC POTTERY FROM TINNEVELLY.

THE great bulk of the deposits in the ancient burial sites in the Tinnevelly district consists of pottery. Most of it is in almost perfect condition, due to the nature of the soil, but in some sites, where a clay soil exists, it is almost all in a fragmentary condition.

It seems to have been placed indiscriminately both inside and outside the urns, a fact to which I have already referred in a previous paper on the subject.[1] For the most part the pottery is well made, the clay being of a thin texture, in some cases red, n others black, or with the two colours combined. Only a few instances of applied colour occur, and little or no ornament is used; such as there is, consisting of short dotted lines, is disposed diagonally around the rim.

The urns are of coarse thick red pottery, and their ordinary form is that of Plate LVIII, fig. 5, but in some sites the shape is that of fig. 6. They are seldom decorated, though in a few instances, simple devices—often mere thumb marks—appear. Examples of such are figs. 13 and 16. In some burials, great heaps of various kinds of pottery are placed in large bowls, of the shape shown in fig. 9, on one side of the urn.

The various types include pots, large and small; bowls; jars, long and small; cups; ringstands, both short and long, besides the urns above alluded to. Many present very little variation from such as are in use at the present day. Figs. 1 to 8 of Plate LV are ordinary examples of large pots, usually of red material. Figs. 9 to 20 and figs. 1 to 26 of the succeeding Plate are various kinds of small cups and bowls. Those of the shape of figs. 15, 21, 22, 23, and 26 of Plate LVI are usually black; the others are red. Figs. 27, 28 of Plate LVI and figs. 4, 5 and 6 of Plate LVII are not very numerous, particularly the last two. Examples of jars are figs. 1, 2 and 3 of Plate LVII. The latter is particularly interesting, in that it is the only example of its kind found. It is identical in shape with some bronze jars from the same sites illustrated in the Annual Report for 1902-03.

The differences in form of the various ringstands will be seen from the illustrations on Plate LVII. Among them the egg-cup-shaped stands are of rare occurrence.

[1] *Annual Report of the Archæological Survey of India*, 1902-03, p. 118.
[2] *Cf.* figs. 21 and 22, Plate LVI.

Of the lids, the more unusual forms are those seen in Plate LVII, figs. 22, 24 and Plate LVIII, fig. 2. Figs 8 and 12 of the latter are examples of the hooks and spouts found on the urns and large basins, to which reference was made in the article in last year's Report referred to above. Two other specimens, which deserve notice, are the standard cup and large bowl illustrated in figs. 10 and 17 of Plate LVIII, the former being the only one of its kind found, and the latter being identical with a bronze one from the same site.

It should be added that in addition to the specimens figured here, some other illustrations of the prehistoric pottery from Tinnevelly are published in the Madras Archæological Reports for 1902-03 and 1903-04.

The names given to the various vessels in the following plates are those by which similarly shaped articles are now known in the local Tamil dialect; but it should be understood that in other Tamil districts, and in the Kanarese and Telugu country, a variety of different names are applied to the same objects.

Plate LV.

(The measurements refer to the diameter of the vase, unless otherwise stated.)

Fig. 1.—*Sāl* (9″). The body is brown; the rim dark.

Fig. 2.—*Kuḍam* (9″). It is black and has three parallel grooved lines in the middle. Now used for conveying water from a distance.

Fig. 3.—*Kuduvai* ($5\frac{1}{2}$″). The upper half is black; the lower reddish. The vessel is used at the present day for preparing broths.

Fig. 4.—*Kuḍam* ($7\frac{1}{2}$″). Similar to fig. 2. This has a beaded rim and four parallel grooved lines around the middle.

Fig. 5.—*Kuduvai* ($4\frac{1}{2}$″). It is black at the mouth and has a reddish body. Similar to the vessels now used for toddy.

Fig. 6.—*Kuḍam* ($9\frac{1}{2}$″) Similar to fig. 2. Colour reddish.

Fig. 7.—Similar ($7\frac{3}{8}$″). Similar. It is black at mouth and has a red body, with five parallel grooved lines below the neck.

Fig. 8.—*Tōndi* (Ht. $9\frac{1}{8}$″). Colour red. Now used for carrying water.

Fig. 9.—*Śaṭṭi* ($4\frac{1}{4}$″). It is a wide-mouthed vessel used for preparing broth or pepper water.

Fig. 10.—Similar ($4\frac{1}{4}$″). Similar. It is black at mouth and has a red body.

Fig. 11.—*Mondai* ($3\frac{3}{4}$″). It has a flat base and wide mouth and neck. Used for keeping water or *kañji*.

Fig. 12.—*Śombu* ($2\frac{1}{2}$″). Mouth black; body red. It has a long and flat neck, with the bottom pointed. Used for drinking water.

Fig. 13.—*Śombu* (Ht. $2\frac{1}{5}$″). Similar. It has a black mouth and red body but no beaded rim. The flat necks of this and the preceding vessel are probably intended for holding them in the hand.

Fig. 14.—*Eṇṇai Kalayam* ($3\frac{3}{4}$″). Colour red. It is a low wide vessel used for keeping gingelly oil, etc.

Fig. 15.—*Kañji Kuduvai.*—It is black and has a pointed base.

Fig. 16.—*Kañji Kuduvai* ($5\frac{1}{2}$″). Similar. It is black and polished, and has a narrow neck and small mouth.

Fig. 17.—*Śatti* ($2\frac{1}{4}$″). Similar to fig. 9 Colour black. It has a wide mouth and pointed bottom, and is probably used for boiling milk.

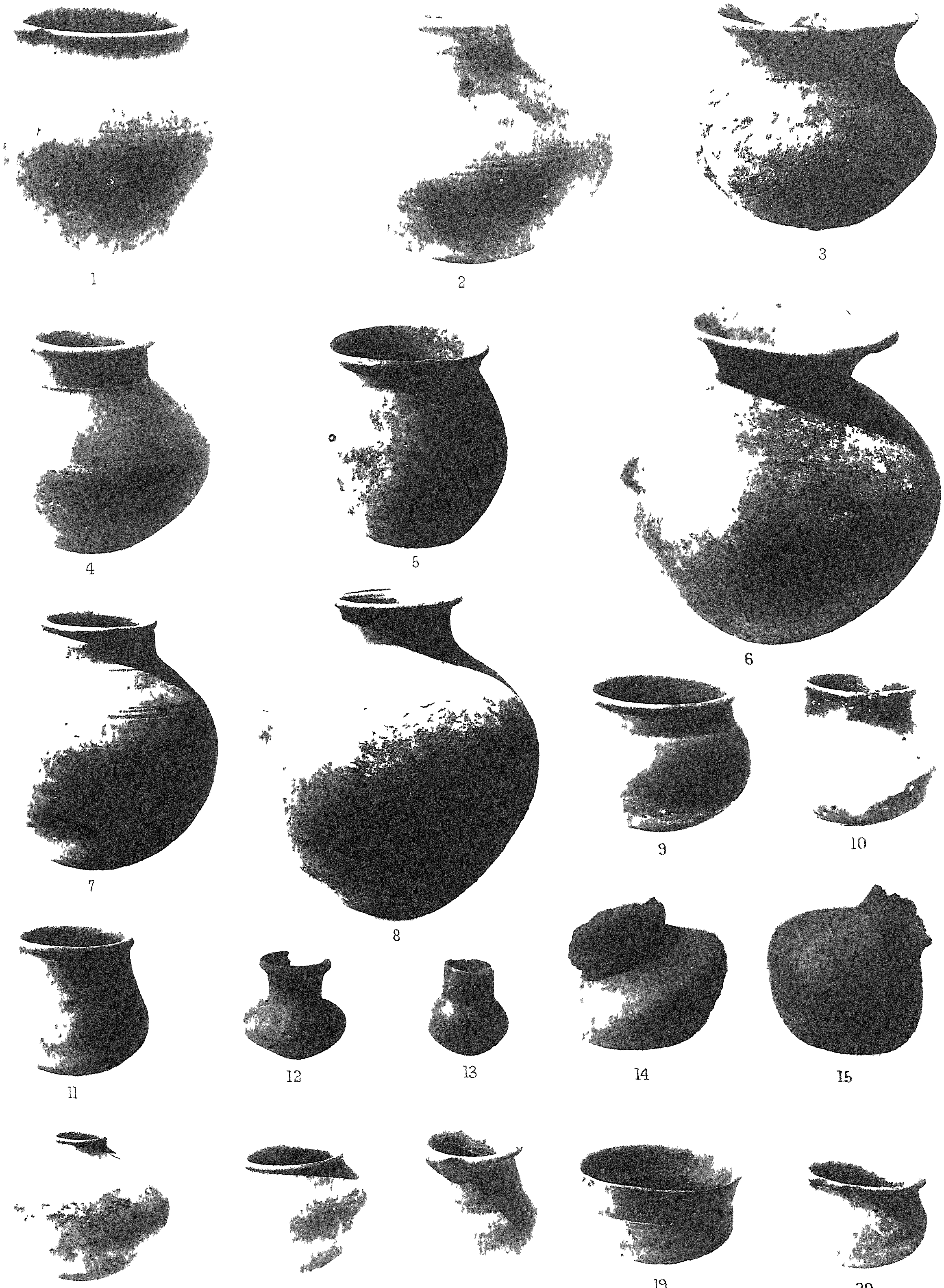
Fig. 18.—*Maravai* (Ht. $2\frac{1}{8}$″). Colour black. It has a rounded bottom and long neck and is used for keeping butter-milk.

Fig. 19.—*Kuṇḍān* ($3\frac{3}{4}$″). It is a black-mouthed, red-bottomed, shallow vessel, generally used for washing rice before it is cooked.

Fig. 20.—*Śaṭṭi* (3″). Similar to fig. 9. Colour brown. Used for miscellaneous purposes.

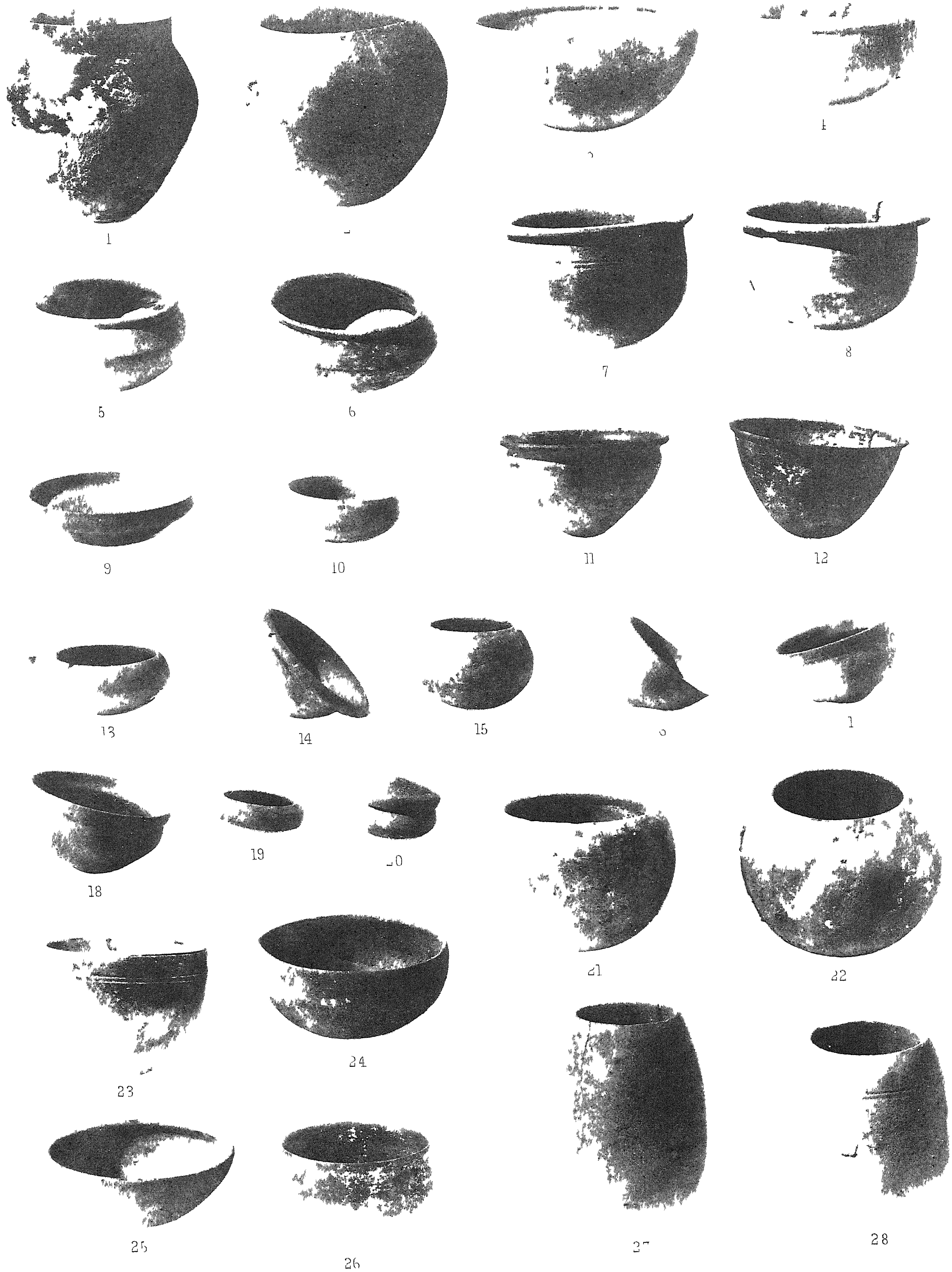
PREHISTORIC POTTERY FROM TINNEVELLY

PLATE LV.



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Survey of India Offices Calcutta February 1905



Photogravure

Survey of India Offices, Calcutta, February 1905

Plate LVI.

Fig. 1.—*Gangālaṁ* (Ht. $6\frac{1}{2}''$). Neck black; body red. It is a long oval-shaped vessel, with wide mouth and flat neck, used for storing water.

Fig. 2.—*Kuṇḍān* ($7''$). Colour red. It is a wide-mouthed, oval-shaped vessel.

Fig. 3.—*Śaruvaśaṭṭi* ($7\frac{1}{2}''$). Colour red. It is a semi-circular vessel with beaded inside rim, used for roasting grain.

Fig. 4.—Similar ($6\frac{1}{2}''$). Similar. The upper portion black; the lower red. It has a beaded outside rim.

Fig. 5.—*Śaṭṭi* ($4\frac{1}{8}''$). Mouth and body black; bottom red. It has a flat body with curved wide mouth.

Fig. 6.—Similar ($4\frac{5}{8}''$). Similar. Mouth and body black; bottom red.

Fig. 7.—Similar ($4\frac{1}{4}''$). Similar. Mouth black; body red. It has two parallel grooved lines around the body below the rim, and is used for boiling broth or preparing vegetables.

Fig. 8.—Similar ($4\frac{1}{5}''$). Similar.

Fig. 9.—*Thaṭṭam* ($4''$). Colour black. It is a flat dish, used as a food plate.

Fig. 10.—*Kiṇṇam* ($3''$). It is a flat cup with a round base, used for keeping sauce or *ghee.*

Fig. 11.—*Bōgiṇi* ($4\frac{1}{8}''$). Top black; bottom red. It is a vessel with pointed bottom, probably used for keeping curds or prepared vegetables.

Fig. 12.—Similar ($4\frac{3}{10}''$).

Fig. 13.—*Mūkku Kiṇṇam* ($3''$). Colour black. It is a flat, round cup with a small tube on one side, and is used for suckling children.

Fig. 14.—*Mūḍi* ($3\frac{3}{5}''$). Colour black. A lid.

Fig. 15.—*Kaṇappu* ($3''$). Mouth black; body red. It is a pot for keeping fire.

Fig. 16.—*Mūdi* ($2\frac{7}{10}''$). Similar to fig. 14. Base pointed.

Fig. 17.—Similar ($3''$). Colour red. There are two parallel grooved lines around the neck.

Fig. 18.—Similar ($3\frac{1}{2}''$). Bottom curved.

Fig. 19.—*Mai Kiṇṇam* ($2\frac{1}{4}''$). Colour black. It is a small cup with flat base, and is utilized for keeping black dye generally used by women for colouring the tips of their eyelids.

Fig. 20.—Similar ($1\frac{9}{10}''$). It has a lid over it, and is utilized for keeping red powder, used by women for marking their foreheads with either a dot in the middle of the forehead or a long perpendicular line between the eyebrows.

Fig. 21 —*Guṇḍu Bōgiṇi* ($6''$). Upper part black; body red. It is a semi-circular vessel having one line around the body near the tip.

Fig. 22.—Similar ($6\frac{2}{5}''$). It has two parallel grooved lines around the body.

Fig. 23.—*Vaṭṭil* ($5\frac{1}{4}''$). Mouth black; body red. It is a semi-oval shaped vessel with two parallel grooved lines around the top and is probably used for serving food during meals.

Fig. 24.—*Kiṇṇam* ($4\frac{3}{4}''$). Another kind. Mouth black; body red.

Fig. 25.—Similar ($4\frac{7}{10}''$).

Fig. 26.—*Vaṭṭil* ($5''$). Colour black. It is used in temples for keeping sacred water (*tīrtham*) and in houses for preserving milk.

Fig. 27.—*Maravai* (Ht. $5\frac{1}{10}''$). Upper part black; lower red. It is used for keeping buttermilk, etc.

Fig. 28.—Similar (Ht. $4\frac{1}{4}''$). It has two parallel lines around the body.

Plate LVII.

Fig. 1.—*Jāḍi* (Ht $7\frac{3}{10}''$). Colour red. It has two parallel grooved lines around the top below the neck. Used for keeping *ghee*, oil, etc.

Fig. 2.—Similar (Ht. $8''$). Similar, except that this has a concave neck. Colour red It has a flat base and is probably used for storage of drinking water.

Fig 3 —Similar (Ht. $6\frac{3}{4}''$). Another kind having a lid. Colour black. It has a flat base and an ornamental line on the lid. It is probably used for preserving any food-stuff, pickles, etc., and is interesting in that it is identical in shape with many of the bronze jars. The bead below the neck in this case is, in the bronzes, made of a separate ring of metal.

Fig. 4.—*Mūśai* (Ht. $4\frac{1}{2}''$). Body red, upper part black. It is an egg-shaped cup, used by goldsmiths to melt gold, etc. It has two parallel grooved lines around the top.

Fig. 5.—Similar (Ht. $6''$). Colour red. The bottom is pointed and there are two parallel lines around the top.

Fig. 6.—Similar (Ht $6''$). Colour greyish.

Figs. 7 to 9.—*Ring-stands* ($6\frac{1}{2}''$, $4\frac{7}{8}''$, $4\frac{3}{4}''$). They are probably used for holding small pots with rounded bottoms.

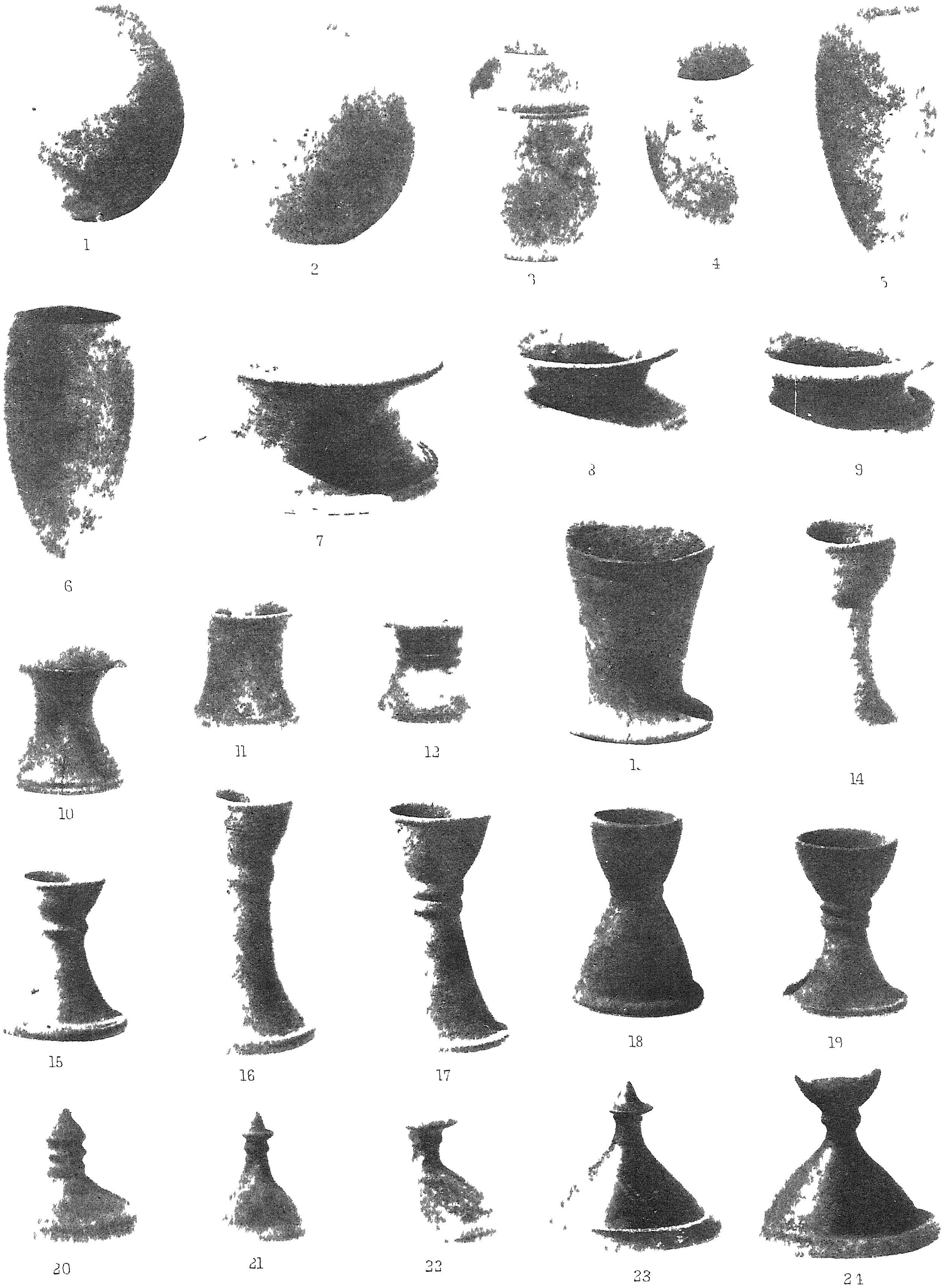
Figs. 10 and 11.—Long stands (Ht. $3\frac{1}{2}''$, $3\frac{1}{4}''$), serving as figs. 7 to 9. Probably these long stands and small ring-stands were placed before some image of worship, and on them would be set small cups or pots with water for use during the ceremony.

Fig. 12.—*Udukkai* ($3\frac{3}{4}''$). Used probably to form a part of a drum, when the openings on both sides are covered with skin; or as a stand.

Fig. 13.—*Mañjaḻ Kinni* (Ht. $4\frac{7}{8}''$). It has a circular flat base, and broad mouth with a flat rim around the top. It is used for keeping ground or powdered saffron.

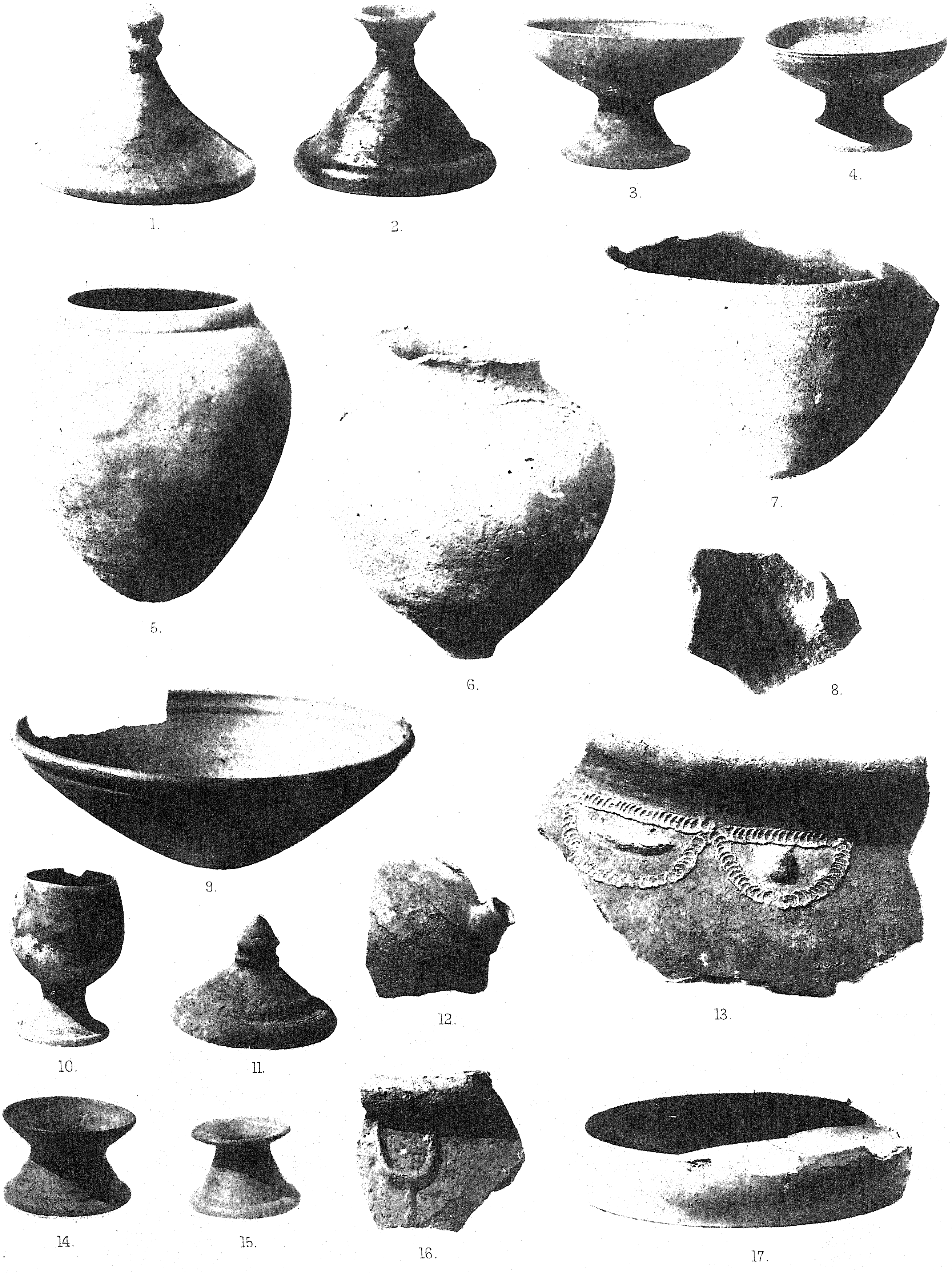
Figs. 14 to 19.—Long cups (Ht. $5\frac{1}{2}''$, $3\frac{9}{10}''$, $6\frac{1}{4}''$, $6''$, $4\frac{4}{5}''$, $4\frac{4}{5}''$). Used for keeping sacred water, burning aromatic gum, or keeping ground sandal (*śandanam*), etc.

Figs. 20 to 24.—*Mūdi* ($3\frac{3}{4}''$, Ht. $3\frac{1}{8}''$, $2\frac{1}{10}''$, $4\frac{1}{2}''$, $4\frac{1}{4}''$). These are different forms of lids used for covering small pots, and are all black. Figs. 22 and 24 are of very rare occurrence.



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Survey of India Offices Calcutta February 190[illegible]



Photogravure.
Survey of India Offices, Calcutta, February 1905.

Plate LVIII.

Fig. 1.—A kind of lid ($7\frac{7}{10}$″). Colour black. The knob is rounded, instead of pointed as in other examples.

Fig. 2.—A kind of lid (5″). The knob is hollowed like a cup, the hollow portion being probably intended for burning camphor.

Figs. 3 and 4.—*Kumbā* ($7\frac{1}{2}$″ and 6″). Colour black. These are vases or small basins resting on a stand, used generally in worship in temples.

Figs. 5 and 6.—*Madamadakkantāli* (Ht. 1′-$7\frac{1}{2}$″ and 1′-10″). Urns used for the burial of the dead. They vary in size from a foot and-a-half to about three feet in diameter. Of the former, the inside is black and the outside red. The latter is of unusual occurrence at the Tinnevelly sites. Colour red.

Fig. 7.—*Śāl Mūdi* (1′-8″). Colour black. It is a covering for a vessel and has two thick lines around the mouth.

Fig. 8.—*Madamadakkantāli kombu,* or urn horn (Ht. 2″). Colour red. It is occasionally found inside the urns at the top, just below the mouth. It is probably intended for suspending iron saucer lamps having chains fixed to them. These lamps are also often found inside the urns.

Fig. 9.—*Śāl Mūḍi* (1′-$4\frac{1}{2}$″). Similar to fig. 7, but of flatter form. Colour black.

Fig. 10.—*Śandana Kiṇṇam* (Ht. $5\frac{1}{8}$″). Colour black. It is a curious shaped vessel used for preserving sandal paste.

Fig. 11.—*Mūḍi* ($2\frac{3}{4}$″). It has a flat rim around the base and a pointed knob.

Fig. 12.—A piece of a big bowl with a spout (Ht. $1\frac{1}{4}$″). Colour black.

Fig. 13.—Rim of an urn (10″). Colour red. It is ornamented with figures of the sun and crescent. This type of urn is generally unornamented, only some having thumb-nail indentations around the rim.

Figs. 14 and 15.—Stands, similar to figs. 7 to 9 (Plate LVII).

Fig. 16.—Part of the rim of an urn (Ht. $3\frac{3}{4}$″) with another form of ornament, which is not repeated around the neck.

Fig. 17.—*Tālaṁ* (11″). A vessel which probably served the purpose of a porringer. Another of exactly similar shape was found in bronze.

A. REA.

THE AGRA FORT AND ITS BUILDINGS.

THE origin of the Agra Fort is uncertain, but we find mention of its existence as early as the time of Maḥmūd, the son of Sulṭān Ibrāhīm (*ob.* A.H. 481, A.D. 1088), the grandson of Mas'ūd, and the great-grandson of Sulṭān Maḥmūd of Ghaznī, for a contemporary poet Mas'ūd-i-Sa'd-i-Salmān eulogizes that prince for his conquest of this fort[1]; there appears to be no mention of it prior to the above date, nor again afterwards, until the supremacy of the Lodīs. It was conquered by the *amīrs* of Sikandar Lodī in A.H. 897 (A.D. 1491).[2] After the defeat of Sulṭān Ibrāhīm at Pānīpat the Emperor Bābar wrested it from Dāūd Karānī, Fīroz Khān Sūr and the mother of the last Lodī king in Rajab, A.H. 932 (February A.D. 1526).[3] In Āgra Fort the crafty Salīm Shāh, son of Sher Shāh, was enthroned by his elder brother 'Ādil Khān in Rabī'-u-l-awwal, (A.H. 952, October A.D. 1544).[4] The old fort, known as the Bādalgaṛh, was demolished by the Emperor Akbar and rebuilt in stone. The work is thus referred to by his court chronicler in the Akbar Nāmah [5]:—

"One of the early events of this auspicious year (A.H. 972, A.D. 1564-5) is the erection of the exalted fort of the capital of Agra with the help of the mason of prosperity. Let it be known to the minds of those who are skilled in measuring the fields of thought and who are versed in the astronomical tables of exalted heavens that (as the world-embellishing God creates a blessed emperor for the accomplishment of the orders of nature and thus adorns the universe) the critical (royal) mind is always anxious to have each individual of the universe appear from the ambush of potentiality upon the stage of actuality to decorate the empire. Sometimes he fertilizes land to the utmost for the life of animals by agricultural improvement, seed-sowing and irrigation, and thus

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[1] (*Tuzuk-i-Jahāngīrī,* edited by Sayyid Aḥmad Allygarh, 1864) p. 2; Elliot, *History of India* (London 1867-77), Vol. IV. p. 522.

The Provincial Gazetteer (N.-W. P., Vol. VII, Allahabad, 1884, p. 578) confounds Maḥmūd, the son of Sultān Ibrāhīm, with his great-grandfather Maḥmūd of Ghaznī, and is hence led to conjecture that some later hand has substituted in that poet's account the name of Agra for that of another town.

[2] *Tārīkh-i-Farishtah* (Cawnpur, 1884), Vol. I, p. 180.

[3] *Farishtah,* Vol. I, p. 205.

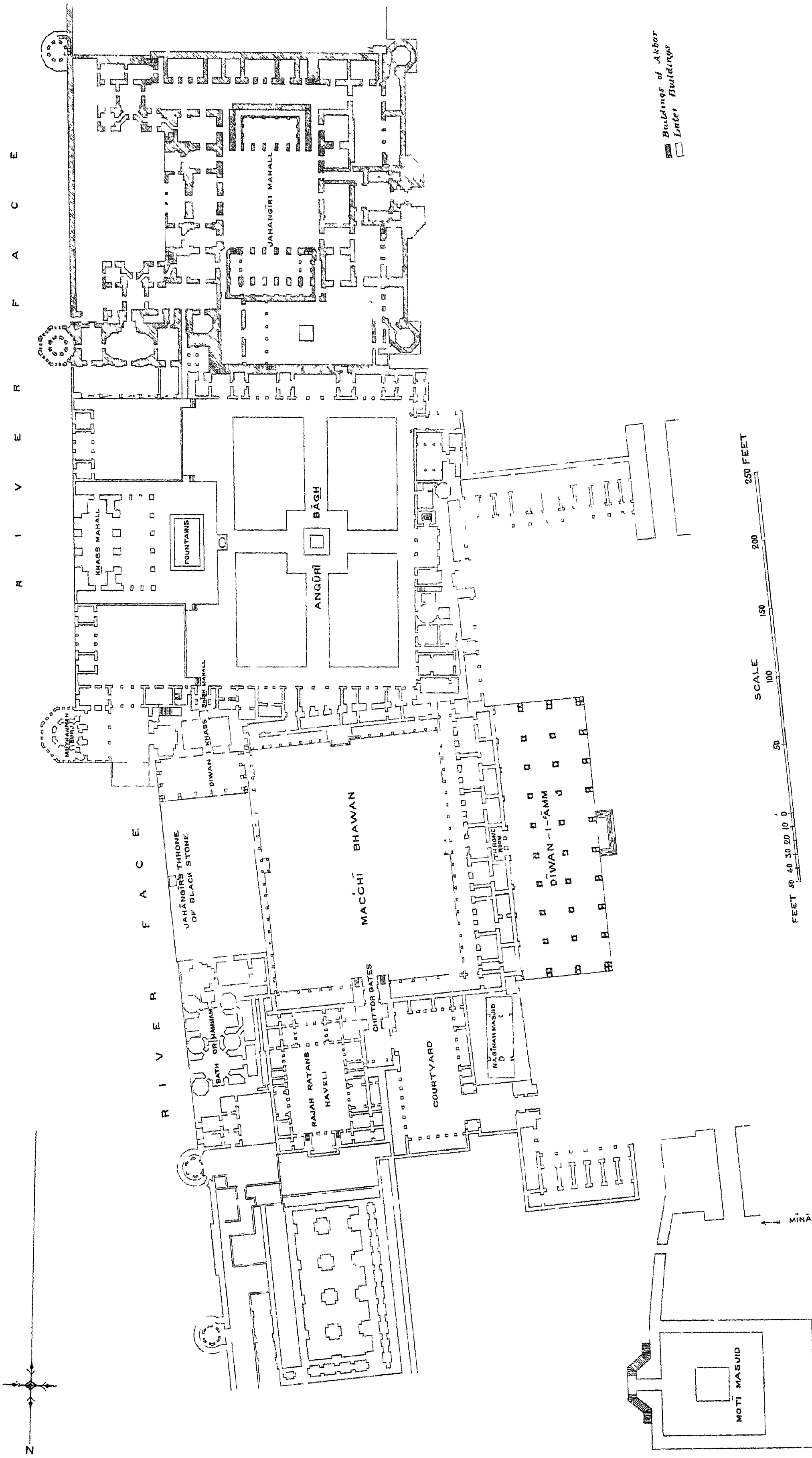
[4] *Farishtah,* Vol. I, p. 225.

[5] *Akbar Nāmah* (Bib. Ind.), Vol. II, p. 76.

Some writers (Keene's *Handbook for Visitors to Agra,* Calcutta 1874, p. 26; Laṭīf's *Agra, Historical and Descriptive,* Calcutta 1896, p 74) believe that Bādalgarh was constructed by Salīm Shāh Sūr. There is no authority for this belief, but, on the contrary, the name points to a Hindu origin, as the lower outwork of the Gwalior fort is also called Bādalgaṛh and was built by Rājā Mān Singh of Gwalior and not by Bādal or Bādar Singh, the brother of Rājā Kalyān Mall. as some persons have supposed. *Farishtah,* Vol. I, p. 190; *Archæological Survey Reports,* Vol. IV, p. 98 and foot-note; *cf.* Elliot's *History of India.* Vol. IV. p. 450.

PLATE LIX.

AGRA FORT
PALACE BUILDINGS



Fazlu d dīn del.

provides means for our welfare; while at other times he acquires the substance of material and physical wealth by erecting strong forts for the protection of property, provisions and reputation, and the security of the individuals of mankind. Accordingly the Emperor pointed out at this time that in the capital of Agra (which is, as it were, the centre of India) an exalted fort (worthy of that city and the glory of this empire) should be founded for political and financial reasons, and an inevitable mandate was issued that the old fort (which was situated on the bank of the river Jamna to the east of the city, and the principal parts of which had become dilapidated owing to the recurring accidents of age and the numerous calamities of time) should be removed, and in that place should be founded an impregnable palace, a fortified citadel and a strong fort of hewn stones which should be firm like the fabric of the empire of this exalted dynasty and durable like the sublime basis of its victorious fortune; wherefore mathematicians of sublime thought and masons of sound intelligence prepared a design of this large edifice, digged foundations lower than the seven strata of the earth, and laid its foundation in an hour which was favourable for such a work and its durability. The width of its wall was appointed to be three [1] imperial yards and the height amounted to sixty. It consists of four gates, by the blessings of which the doors of fortune are open to the four corners of the earth. Three or four thousand clever masons, strong workmen and other labourers in building worked daily. From top to bottom the fire-red hewn stones (each of which might in respect of purity be a world-reflecting mirror and in respect of colour the cosmetic of the cheek of prosperity) are joined so closely that even a hair cannot find its way into their joints. This exalted fort (the like of which even he that measures the fields of imagination has not seen) was erected and finished happily and successfully, including wall, battlement and embrasures, in the course of eight years under the superintendence of the sincere and true Qāsim Khān, the overseer of buildings and ships."[2]

Another contemporary historian, Albadāonī, thus speaks on the subject:—

"In this year (A.H. 972) the project of building the fortress of Ágrah was conceived, and its citadel, which had before been of bricks, he had built of hewn stone. And he ordered a tax of the value of three sérs of corn on every *jarīb* of land in the district, and appointed [3] collectors and officers from the Ámírs who held jágírs to collect it. In the course of five [4] years it was completed. (The dimensions of the fortress are as follows:) breadth of wall, 10 *guz*, height 40 *guz*; with a deep trench [5] both sides of which were built up with stone and lime, its width 20 *guz*, its depth to the surface of the water 10 *guz*, and it was filled with water from the river Jamna. And the like of that fortress can scarcely be shown in any other district. And the date of the gate thereof was found by Shaikh Faizí to be Biná-í-dar-í Bihisht,[6] 'The building of the gate of Paradise.' And cost of the building of the fortress was about three *karors*."

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[1] MS. سه, three, which is evidently meant for سی, thirty.

[2] *Akbar Nāmah*, Vol. II, p. 246-7.

[3] The correct translation is, "and the appointed collectors and commanders collected it from the *amīrs* who held *jāgīrs*."

[4] MS. پنج five, is evidently meant for پانزده, fifteen, because the chronogram at the end of this passage gives A. H. 986.

[5] The *N.-W. P. Gazetteer* (Vol. VII, p 690) erroneously ascribes this ditch to Aurangzeb.

[6] It gives A H. 974.

After it was completed it became the depository and store house of all the gold of Hindustan, and this *mnemosynon* was found for the date. Shud biná-i-qil'ah bahr-zar, "The fortress was built for the sake of gold." [1]

Of the four gates mentioned above two on the west and south, now called, respectively, the Dehli and the Amarsingh Darwāzah, are open and the rest closed. Leaving aside the small differences in the contemporary accounts, we begin with the Dehli Gate which may possibly be identical with Albadāonī's gate finished in A.H. 974 (A.D. 1566). On our entry we find in the ground floor chamber to the right two Persian inscriptions one above the other. The upper one has now almost entirely peeled off, but fortunately a considerable part of the text has been preserved in the Transactions of the Archæological Society of Agra. The following is the reading of the Transactions:

حضرت شهاهنشاه جم جاه خلافت پناه ظل الله جلال الدین محمد اکبر پادشاه در سنه ۱۰۰۸ توجه ...
فرمود در سنه ۱۰۱۰ نزول اجلال فرمود ... س دمام کر که او .... چون بگلذار آگره جاے گرفت

"His Majesty, the Emperor, a Jamshed in dignity, the asylum of caliphate, the shadow of God, Jalālu-d-dīn Muḥammad Akbar Pādshāh, set out in the year 1008...... ...... and in the year 1010 alighted gloriously.................when he took his seat in the garden of Agra."[2]

This inscription evidently refers to Akbar's march to the Dekhan and Khāndesh in A.H. 1008 (A.D. 1599-1600) and his return to Agra in A.H. 1010 (A.D. 1601-2) and not to the building of the gateway as is supposed by some writers. [3] The same subject is found in the Persian inscription on the Baland Darwāzah at Fatḥpur Sīkrī, which clearly says that Akbar on his return from the conquest of the Dekhan in A.H. 1010 halted at Fatḥpur on his way to Agra.[4] The lower inscription reads as follows:—

شاه جهان چون گرفت جاے بتخت شرف   تخت زرفعت نهاد برز بر چرخ پا
دست دعا بر کشاد پیر فلک از نشاط   گفت که بادامدام حکم تو فرمان روا
خواست که نامي کندسال جلوسش رقم   بود در آندام لبش پرز ثنا و (دعا)
میل دو چشم حسود یک الفش کرد و گفت   باد جهان پادشاه شاه جهانگیر (ما)

"When the king of the world took his seat on the throne of dignity,
The throne thus exalted placed its foot on the sky.
The old heaven from joy stretched forth the hand of benediction,
(And) said, 'may thy rule last for ever.'
Nāmī wished to write down the year of his accession.
His lip was at that time full of praise and prayer.

قائله و راقمه محمد معصوم البکری
Composed and written by Muhammad Ma'ṣūm of Bakkar.[5]

[1] *Muntakhabu-t-tawārīkh*, English translation by W. H. Lowe, M.A. (Calcutta 1884), Vol. I. pp. 74-5.

[2] Vide *Transactions of the Archæological Society of Agra* (January to June 1874, Agra 1874): Notes on some inscriptions in the Agra Fort by Lala Bahal Rai, p. XX; *Proceedings of the Asiatic Society of Bengal* (for November 1874), Vol. 43, p. 209. Mr. Carlleyle's reading (*A. S. R.*, Vol. IV, p. 114) makes little sense and still less does that of Sayyid Muḥammad Laṭif (*Agra*, p. 75).

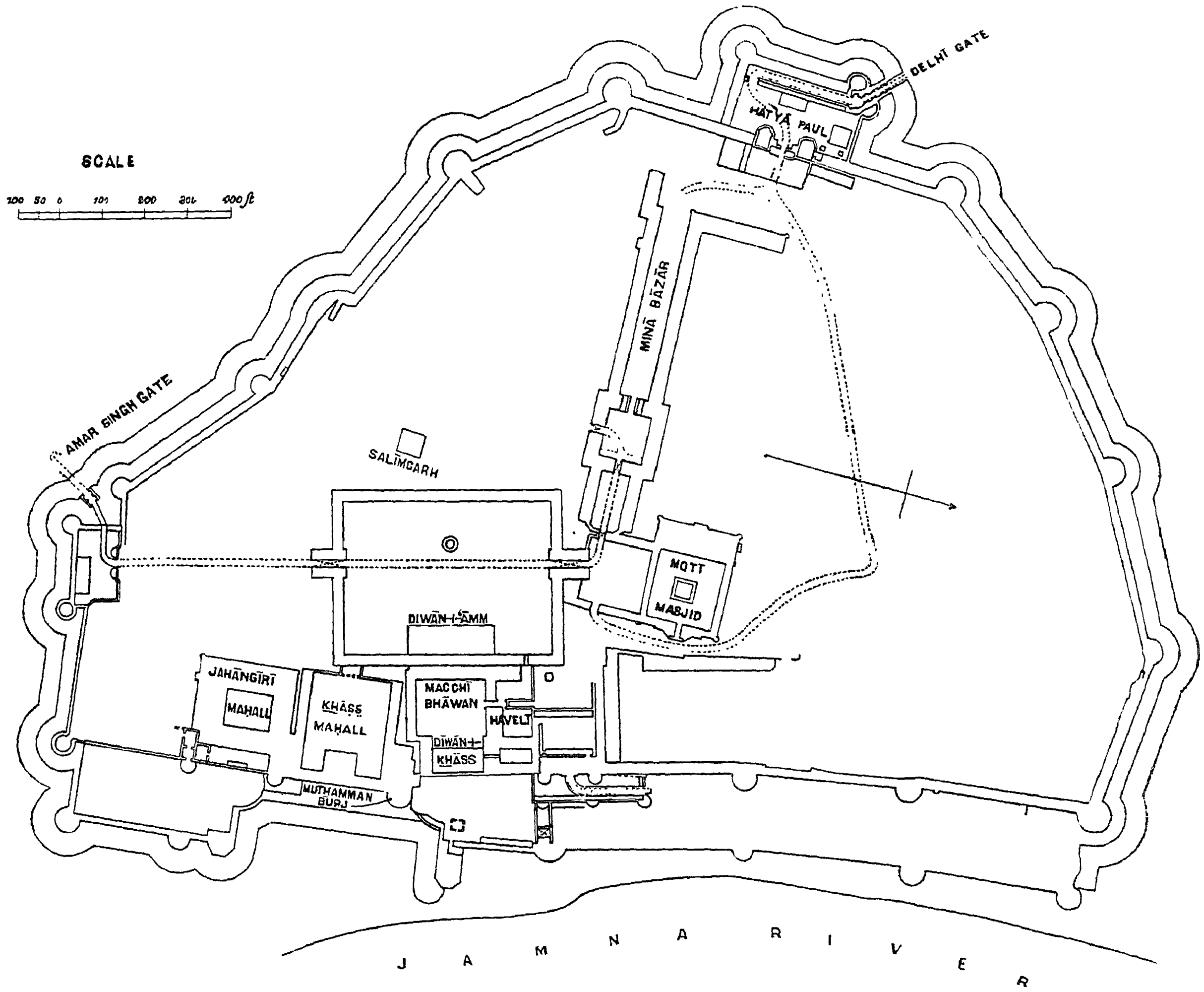
[3] *A. S. R.*, Vol. IV, p. 115; Laṭīf, *Agra*, p. 75; *N.-W. P. Gazetteer*, Vol. VII, p. 690.

[4] *A. S. B. Proceedings*, for August 1874, p. 175.

[5] Properly Bhakkar, which is a town on the Indus. Mr. Carlleyle and Muḥammad Laṭīf do not seem to understand it because they read al-Bukra and al-Bikra respectively. For a biographical sketch of this poet whose *nom-de-plume* was Nāmī see *Āīn*, Dr. Blochmann's translation, Vol. I, pp. 514-5; *Muntakhabu-t-tawārīkh*, Vol. III, pp. 364-75.

He made one *alif* of it a rod to blind the eye of the envious and said,
May our king Jahāngīr be the king of the world." [1]

This inscription commemorates Jahāngīr's accession. The idea expressed in the last couplet, though not new, is very beautiful. The chronogram *bād jahān pādshāh shāh-i-Jahāngīr-i-mā* gives A.H. 1015. The poet therefore wanted to extract one *alif* from it to obtain A.H. 1014 which is the year of Jahāngīr's accession. Accordingly he resorts to a clever device by which he disposes of the redundant letter, since he says that we should take off from the chronogram an *alif* which in writing resembles a rod, and blind therewith the envious to prevent the effect of their evil eye.



Passing through the Dehli Gate and up a paved ascent we come to the inner

[1] *A. S. A. Transactions* (January to June 1874), p. XX ; *Proceedings A. S. B.*, November 1874, p. 209. In the text after البكري the Transactions have, اص , the fragment of a word, which is written as اصلا by Dr. Blochmann in the Proceedings. But this improvement is not warranted by the Fatḥpur Sīkrī inscription on the Baland Darwāzah by the same poet, which has مسكنا instead (*Proceedings, A. S. B.* for August 1874, p. 174). The word اصلا refers to the original home of his ancestors which was Tirmiz, and مسكنا to his present residence which was Bhakkar; hence the word اصلا after البكري cannot be correct. Mr. Carlleyle (*A. S. R.*, IV, pp. 114-5) is wrong in ascribing this inscription to Shāh Jahān's reign. His reading and translation are very incorrect and those of Laṭīf (*Agra*, p. 75) are not much better. Some authors who do not understand the last couplet give the date as A.H. 1015 (*A. S. R.*, IV, p. 115, note; *N.-W. P. Gazetteer*, Vol. VII, p. 690).

entrance called the Hatyā Paul (Elephant Gate),[1] because formerly two stone elephants with their riders stood on the two sides of it.[2] Albadāonī informs us that this gateway was built in A.H. 976 (A.D. 1568), and the following are his words:—

"And in this year (A.H. 976) was finished the Hatyā Paul which is the name of the gate of the new fort of Agra, and its date is this,

The pen of S͟hīrī wrote for its date,
Be mit͟hl āmadah darwāza-i-fīl
(Incomparable is the Elephant Gate)."[3]

The elephants [4] were broken to pieces by the Emperor Aurangzeb in the eleventh year of his reign, their pedestals with foot-holes being still extant. This act of the Emperor is thus referred to by the author of the *Maāt͟hir-i-'Ālamgīrī*:—

"According to the requisition of the Muḥammadan law and in pursuance of the institution of abolishing heresy the Emperor ordered that the statues of the two stone elephants of full size made by masters of exquisite skill and set on the two sides of the gate of the fort, hence called the Hatyā Paul, should be removed." [5]

From the Hatyā Paul the passage formerly led through the Mīnā Bāzār, now used for the Commissariat godowns, to the Dīwān-i-'Āmm of S͟hāh Jahān, but before describing this it will be well to notice the earlier buildings in the fort. "The *bāradarī* known as the Salīmgaṛh (Fort of Salīm) stands near the modern military barracks to the north-west of the Jahāngīrī maḥall, and on the highest point within the fort. It consists of a single room, 34 feet 10 inches square, with arched openings on all sides. The name Salīmgaṛh is applied also, according to Mr. Carlleyle, to the irregular four-sided plateau on which the *bāradarī* stands, and which in his opinion marks the site of the Palace of Prince Salīm,[6] afterwards Jahāngīr. He doubtless believed that the *bāradarī* formed part of that Palace. But more usually the name Salīmgaṛh has been connected with Salīm S͟hāh, son of S͟her S͟hāh, he who built a fort of the same name on an island in the Jumna at Delhi.[7] This was the opinion of Fergusson, who appears to have concluded on stylistic grounds also that the *bāradarī* should be referred to the reign of S͟her S͟hāh. "In the citadel at Agra" this authority says, "there stands—or at least stood when I was there—a fragment of a palace built by S͟her S͟hāh, or his son Selim, which was as exquisite a piece of decorative art as anything of its class in India. Being one of the first to occupy the ground this palace was erected on the highest spot within the Fort, hence the present Government, fancying this a favourable site for the erection of a barrack, pulled it down and replaced it by a more than usually hideous brick erection of their own. * * Judging from the fragment that remains, and the accounts received on the spot, this palace must have

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[1] Latīf (*Agra*, p. 76) supposes that the Hatyā Paul is the same as the "Darshan Darwaza" of William Finch, but he is not right. *Vide* Keene's *Handbook*, p. 24; E. B. Havell, *A handbook to Agra and the Taj*, London, 1904, p. 42.

[2] *Āīn*, Translation, Vol. II, by H. S. Jarret, p. 180.

[3] *Muntak͟habu-t-tawārīk͟h*, Vol. I, p. 108; *ib.* (English translation), by W. H. Lowe, M.A., Vol. I, p. 112. Mullā S͟hīrī (*ob.* A.H. 994), a poet of the reign of Akbar. For a detailed account see the *Muntak͟habu-t-tawārīk͟h*, vol. III, pp. 248-53.

[4] Latīf (*Agra*, p. 76) seems to confound these elephants with those standing at the Delhi Gate of the Delhi Fort.

[5] *Maat͟hir-i-'Ālamgīrī* (Bib. Ind.), p. 77.

[6] *A. S. R.*, Vol. IV, p. 124.

[7] *Tuzuk-i-Jahāngīrī* (Allygurh, 1864), p. 65.

gone far to justify the eulogium more than once passed on the works of these Paṭhāns —that 'they built like giants, and finished like goldsmiths;' for the stones seem to have been of enormous size, and the details of most exquisite finish."[1]

"If the fragment to which Fergusson refers is the same as the *bāradarī* now called the Salīmgaṛh—and there is no reason to suppose otherwise, nor can any trace be found of another building having existed here, which would answer to his description—then it must be said that the terms of admiration in which he speaks of it are somewhat overstrained and misleading. The eaves or *chajjas* are, it is true, unusually large and elaborately carved, but the general design and massiveness of its architecture, and the finish of its sculptured decoration, find close parallels among the monuments known to have been erected by Akbar, while the patterns employed are strikingly in the style that found favour during that Emperor's reign. The elaborate paintings, for instance, with which the interior is covered, are very like those in the Jāmi' Masjid at Fatḥpūr Sīkrī, and the clumsily drawn geometric figures, which ornament the quarter-dome-shaped recesses in the four corners of the hall, are found repeated in other buildings both at Agra and Fatḥpūr Sīkrī. These resemblances were noticed by Mr. Keene,[2] who remarks also that the Salīmgaṛh was considered by the natives as having formed the *Naubat-k͟hāna* or drumstand of Akbar's Palace. This last statement is probably inaccurate, since at the present day the natives know the Salīmgaṛh as distinct from Akbar's *Naubat-k͟hāna*; nor does Mr. Keene seem to be correct in stating, as he does in the following sentence, that 'Suleem's fort was called Badalgarh, and is generally stated to have been entirely demolished by Akbar in founding the existing Fort.' At least there are good reasons for believing with General Cunningham[3] that the Bādalgaṛh was built by Hindus, while on the other hand there is no authority for assigning to it an Afg͟hān origin.

"Yet another suggestion made by Mr. Benson in the Provincial Gazetteer[4] is that the Salīmgaṛh may be the *bāradarī* of Bīrbal, Akbar's favourite Hindu courtier, which 'according to some native authorities exists in the Fort.' What authorities these are that Mr. Benson refers to, has not yet been discovered, but the identification would accord well with the style of the pavilion."[5]

To the south-east of the Salīmgaṛh stands the so-called Jahāngīrī Maḥall. "This palace has been fairly fully described by several writers, and particularly by General Cunningham's assistant, Mr. A. C. Carlleyle.[6] Fergusson has not much to say of it, but his brief description is well worth quoting: 'One,' he says, 'of the most remarkable and characteristic of Akbar's buildings is the old or Red Palace in the Fort, so called from being constructed entirely of red sandstone, unfortunately not of a very good quality, and consequently much of its ornament has peeled off. It is a square building, measuring 249 feet by 260 feet. In the centre is a courtyard 71 feet by 72 feet, on either side of which are two walls facing one another. The largest, 62 feet by 37 feet, has a flat ceiling of stone, divided into panels, and supported by struts of purely Hindu design, very similar to those used in the palaces of Man Sing and Vicramaditya at

[1] *History of Indian and Eastern Architecture* (London 1899), pp. 572-73.
[2] *A handbook for Visitors to Agra and its neighbourhood*, by H. G. Keene (Calcutta, 1874), p. 26.
[3] *A. S. R.*, Vol, IV, p. 98, and note.
[4] *North-Western Provinces Gazetteer* (Allahabad, 1884), Vol. VII, p. 690.
[5] *A. S. R.*, 1902-3, pp. 67-8.
[6] *A. S. R.*, Vol. IV, pp. 124 *sqq*.

Gwalior. Every feature around this court is indeed of pure Hindu architecture. No arches appear anywhere, but the horizontal style of construction everywhere. The ornamentation too, which is carved on all the flat surfaces, is of a class used by Akbar, but not found in the buildings of others. Indeed, throughout this palace arches are used so sparingly, and Hindu forms and Hindu construction prevail to such an extent, that it would hardly be out of place at Chittore or Gwalior, though it still bears that impress of vigour and originality that he and he only knew how to impress on all his works.'[1]

"There has been much argument about the date of this palace. Mr. Carlleyle,[2] on the evidence, I think, of its name alone, assigned it to the reign of Jahāngīr. He is followed by W. Hunter [3] and Syad Muhammad Latif.[4] Their opinion is not shared by General Cunningham, who concluded from Jahāngīr's own account that his palace must have been quite close to the water gate, between it and the Muthamman Burj. His argument, it may be noted, finds additional support in the statement of the court chronicler of the Emperor Shāh Jahān to the effect that Jahāngīr had erected marble halls (*aiwān*) on three sides of the Shāh Burj (Regal tower), now called the Muthamman Burj.[5] The Red Palace itself is attributed by the General to Ibrāhīm Lodī.[6] Fergusson, as we have already seen, believed it to have been built by Akbar,[7] and in this view he is followed by Mr. Keene.[8] Professor Blochmann utilized the authority of native historians to show that it was not at any rate a *pre-Mughal* building, since the fort and palace, which existed before the time of Akbar, were brick buildings and entirely demolished by that Emperor; but the authorities he cites are not conclusive on this point.[9]

"On the whole the authority and evidence—both historical and architectural—favour its assignment to Akbar, and we may perhaps assume that it was used as the residence of the heir-apparent—afterwards Jahāngīr—and his Hindu wives, though it may not have been intended for him in the first instance." [10]

The name Jahāngīrī Maḥall does not appear to be found in any Muhammadan history. My own impression is that its original name was the Bengālī Maḥall—the term Bengālī being still applied to the bastion tower at the south-east corner of this palace—which is mentioned by Abū-l-Fazl in connection with Akbar's return to Agra in the fourteenth year of his reign. The passage runs, "In short, travelling by marches, on the 31st of Urdī Bahisht of the Ilāhī era, corresponding with Thursday the 24th Dhu-l-qa'dah (A.H. 977), the Emperor spread the shadow of his glory on the capital of Agra, and lodged in the centre of the palace of the city in the Bengālī Maḥall,[11] whose fabric had recently reared its head to the sky."[12] The palace of

[1] *Indian and Eastern Architecture*, p. 578.
[2] *A. S. R., loc. cit.*
[3] *Imperial Gazetteer of India* (London 1885), Vol. I, p. 73.
[4] *Agra, historical and descriptive* (Calcutta 1896), p. 31.
[5] Bādshah Nāmah, *Bibl. Ind.*, Vol. I, Pt. II, p. 239.
[6] *A. S. R.*, Vol. IV, Preface, p. 12.
[7] *Op. cit.*, p. 578. In the foot-note Mr. Fergusson speaks erroneously of Mr. Carlleyle's theory as being shared by General Cunningham.
[8] *Transactions of the Archæological Society of Agra* (January to June 1874). "Note on General Cunningham's preface to Report for 1871-72, Vol. IV," by H. G. Keene, President of the Society, pp. 27-28.
[9] *Op. cit.*, pp. xxx-xxxi.
[10] *A. S. R.*, 1902-03, pp. 61-62.
[11] Albadāonī says that the Bengālī Maḥall in Agra and another lofty palace were completed respectively in A. H. 970 and 969, *Muntakhabu-t-tawārīkh* (Eng. trans.), Vol. I, p. 74.
[12] *Akbar Nāmah*, Vol. II, p. 340.

Akbar seems to have extended between the Bengālī Burj and the Muthamman Burj, and the so-called Jahāngīrī Maḥall really occupies the central part of it. Moreover, no other building of Akbar in the fort appears to deserve the above encomium. The reason for the name Bengālī Maḥall may be found in the statement made in the Āīn to the effect that Akbar's fort in Agra contains more than five hundred stone edifices in the fine styles of Bengāl and Gujrāt.[1]

The rest of Akbar's buildings in the fort were demolished by the Emperor Shāh Jahān as we shall presently learn.

The Emperor Jahāngīr continued the work commenced by Akbar. He speaks of the fort in the following words :—

"Agra is one of the large ancient cities of India on the banks of the river Jumna. It had an old fort which was demolished before my birth by my father, who rebuilt it with red hewn stones, the like of which is not pointed out by the travellers of the world. It was finished in the course of fifteen or sixteen years. It possesses four gates and two windows, and cost thirty-five lakhs of rupees, which is equal to one hundred and fifteen thousand *tumans* as current in Persia or one *karor* and five lakhs of *Khānīs* as current in Tūrān."[2]

Jahāngīr's palace, which has already been referred to, was finished about the fourteenth year of his reign. The following description of it is from the Emperor's own pen :—"I then mounted my horse and proceeded into the castle of Agra, to the saloon, or palace, which I had ordered to be there built for my own residence.

"This pavilion, or, rather, saloon, rests upon the gate which opens on the river Jumna, and is supported by twenty-five pillars, all covered with plates of gold, and all over inlaid with rubies, turquoises, and pearl. The roof on the outside is formed into the shape of a dome, and is also covered with squares of solid gold, the ceiling of the dome within being decorated with the most elaborate figures of the richest materials and most exquisite workmanship. The adjoining tower is a structure of four storeys all decorated in the same costly manner as I have just described, and is from top to bottom of an octagonal shape. Annexed to this latter structure is a small gallery overlooking the Jumna, from whence, when so disposed, I have been accustomed to view the combats of elephants, neilahgaos, antelopes and other wild animals. In another storey in this building, more on a level with the river, I occasionally distribute to the Ameirs of my court, in social communion, wine from my own goblet ; and in this same gallery it is that those entitled to particular privileges are admitted to a seat in my presence.

"There is, however, another saloon of general audience, to which all classes of the people, high and low, without exception, are admitted to my presence ; but in this a recess is parted off by a lattice work of gold ; and at the foot of the hall is formed an area, in which is erected a mohidger (or balustraded stage perhaps) of the height of a man from the ground, also of gold, where the most distinguished members of my court, princes of the blood, and nobility from the rank of one thousand to that of five thousand, are appointed to take their stand on occasions of state and ceremony. The area is covered all over with carpets of thirty and forty cubits, and above is a triple

[1] *Āīn* (Translation), Vol. II, p. 180.

[2] *Tuzuk-i-Jahāngīrī*, p. 2.

canopy of velvet wrought with gold, as a protection against the rays of a meridian sun. The lattice-work and platform are both of solid gold, and so contrived as to be easily taken to pieces, for removal from place to place, always forming a part of the imperial equipage, ready to be set up whenever necessary. I should only add that the quantity of three thousand maunns of gold was expended in the fabrication of this article of the imperial appointments."[1]

The octagonal tower mentioned above is the Shāh Burj, now called the Muthamman Burj, to the pinnacle of which was tied the Chain of Justice. The Emperor thus refers to it in his Memoirs :—

" On ascending the throne the very first ordinance which issued from me was the fastening of the Chain of Justice for this purpose that, when the administrators of justice delay or neglect hearing and redressing the grievances of the injured and oppressed, the latter should come to the chain and shake it so that its sound might alarm me. Its arrangement was in this way that I ordered that a chain of pure gold should be made, thirty yards long, consisting of sixty small bells and weighing four *manns* of Hindostan, which is equal to thirty-two maunds of ' Irāq. They fastened one end of it to the pinnacle of the Shāh Burj of the Agra fort, and the other to a stone pillar which was erected at the bank of the Jumna."[2]

Somewhere near the Shāh Burj must have been the *Jharoka-i-darshan* of the Emperor Jahāngīr, which has been thus referred to by Edward Terry, then chaplain to the Right Hon'ble Sir Thomas Roe :—" First, early in the morning, at that very time the sun begins to appear above the horizon, he appears unto his people in a place very like unto one of our balconies, made in his houses, or pavilions for his morning appearance, directly opposite to the east, about seven or eight feet high from the ground ; against which time a very great number of his people, especially of the greater sort, who desire as often as they can to appear in his eye, assemble there together to give him the Salam, or good morning, crying all out, as soon as they see their king, with a loud voice, Padsha Salamat, which signifies, Live O great king, or O great king health and life, (as all the people cried 1 Kings, 1,39. God save King Solomon; and thus they clapped their hands for joy, when Jehoash was made King, or let the King live, 2 Kings, 11-12)."[3] It was at the foot of this *Jharoka-i-darshan*, in the garden below, that the statue of the Rana and his son was placed. Mention of the statue occurs in the following passage :—" We had ordered the clever sculptors that they should hew a marble statue of the Rana and his son Karna true to their statures and forms. On this date (8th Shahrewar, 11th year of the reign) it was finished and shown to me. I ordered that it should be carried to Agra, and erected in the garden below the *Jharoka-i-darshan*."[4]

The saloon of general audience, which has been mentioned above, is the Dīwān-i-'Āmm of Jahāngīr. William Hawkins, who arrived at Agra on the 16th of April, A.D. 1609, and left on the 2nd of November, A.D. 1611, has given an interesting account of it. " Then," he says, " at three of the clocke all the Nobles in general (that be in

[1] *Memoirs of the Emperor Jahangueir*, translated into English by Major David Price (Calcutta 1904), pp. 211-3.
[2] *Tuzuk*, pp. 3-4.
[3] *A voyage to East India* (London 1777), pp. 370-1.
[4] *Tuzuk*, pp. 162-3.

Agra, and are well) resort unto the Court, the King coming forth in open audience, sitting in his Seat Royall, and every man standing within a red Rayle, and the rest without. They are all placed by his Lieutenant-General. This red Rayle is three steppes higher than the place where the rest stand: and within this red Rayle I was placed, amongst the chiefest of all. The rest are placed by Officers, and they likewise be within another very spacious place rayled: and without that Rayle, stand all sorts of horsemen and souldiers that belong unto his Captaines and all other commers. At these Rayles there are many doors kept by many Porters, who have white rods to keepe men in order. In the middest of the place, right before the King, standeth one of his Sheriffes, together with his Master Hangman, who is accompanied with forty hangmen, wearing on their heads a certaine quilted cap, different from all others, with an Hatchet on their shouldiers: and others with all sorts of Whips, being there readie to do what the King commandeth. The King heareth all causes, in this place, and stayeth some two hours every day (these Kings of India sit daily in Justice every day, and on the Tuesdays doe their executions)." [1]

The two balustrades mentioned by Hawkins were evidently of wood coloured red, and so they remained till the 8th year of Jahāngīr's reign, when he made some alterations referred to in the following passage :—

"In the Dīwān Khāna-i-Khāṣṣ-o-'Āmm [2] two balustrades of wood are set up. Within the first balustrade are *amīrs*, ambassadors and men of honour. No one is allowed in this circuit without permission. In the second balustrade which is larger than the first are allowed all *manṣabdārs*, *Aḥadīs* [3] and those who may be called servants; and outside this balustrade stand servants of *amīrs* and other people who come to the said Dīwān Khāna. As there was no difference between the first and second balustrades, it struck my mind that the first should be covered with silver. I ordered that the said balustrade, the ladder leading from it to the gallery of the *Jharoka*, and the two elephants which the skilful workmen have made of wood on the two sides of the room of *Jharoka* should all be cased in silver. After the completion of the work it was represented to me that one hundred and twenty-five maunds of silver by Indian weight which is equal to eight hundred and eighty seers of Europe was spent on it. Verily it has produced a fresh purity and glitter as if it ought to have been so." [4]

Edward Terry, speaking of the throne in the *Jharoka* of the Dīwān-i-'Āmm, says :—
"And further they (English merchants) told me that he (the Mogul) hath a most glorious throne within that his palace, ascended by divers steps, which are covered with plate of silver, upon the top of which ascent stand four lions upon pedestals of curiously coloured marble; which lions are all made of massy silver, some part of them gilded with gold, and beset with precious stones. Those lions support a canopy of pure gold, under which the Mogul sits, when he appears in his greatest state and glory." [5]

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[1] *Hawkins' Voyages*, edited by Clements R. Markham, C.B., F.R.S. (London 1878), pp. 436-7; see also *Travels in India in the seventeenth century*, by Thomas Roe and Dr. John Fryer (London 1873), p. 21.

[2] Now called the Dīwān-i-'Āmm.

[3] *Vide Āīn*, Translation, Vol. I, pp. 231 and 249.

[4] *Tuzuk*, p. 118.

[5] *A voyage to East India*, p. 372.

It was in the courtyard of this Dīwān-i-'Āmm that a riot took place in the first year of Jahāngīr's reign, wherein some persons of note took part. The following account of it is from the Emperor's own pen:—

"On the twenty-seventh of Sha'bān (A.H. 1014) a strange conduct was evinced by the sons of Akhairāj, son of Bhagwān Dās, the uncle of Rājā Mān Singh. These ill-starred (fellows) who were named Abhai Rām, Bijai Rām and Śyām Rām happened to be in a very bad humour. The said Abhai Rām had shown incivilities, but I had for all that forborne his faults. When on this date it was represented that the ill-starred (Abhai Rām) wanted to send home without permission his women and children and then flee away himself to take refuge with the Rana who is one of the ill-wishers of our dynasty, I told Rām Dās and other Rājpūt *amīrs* that if any one of them were a surety, I would retain the *manṣab* and *jāgīr* of the unfortunate and pardon their past faults. Owing to their extreme misfortune and ill-nature no one became a security for them. I ordered the *Amīru-l-umarā*[1] that, as no one became a surety for the good behaviour and conduct of the unfortunate persons, they should be put under the custody of one of the servants of the court till released on bail. *The Amīru-l-umarā* put them under the charge of Ibrāhīm Khān Kākar, who was afterwards honoured with the title of Dilāwar Khān, and Ḥātim, the second son of Manglī, who was entitled the Shahnawāz Khān. When they wanted to dispossess these fools of their arms, the latter opposed, not heeding the position (of the officials), and in accord with their servants began to fight and riot. The *Amīru-l-umarā* informed me of this fact. I ordered that the unfortunate persons should receive punishment for their action. The *Amīru-l-umarā* set out to repel them, and after this I also sent Shaikh Farīd. From the opposing party two Rājpūts, one with a sword and the other with a dagger, confronted the *Amīru-l-umarā*. A servant of the latter, named Quṭb, grappled with the daggerman and was killed with the wound of the dagger, but they tore him even to pieces. With the swordsman one of the Afghān servants of the *Amīru-l-umarā* grappled and killed him. The Dilāwar Khān with a dagger drawn turned to Abhai Rām, who had stood firm with two others, and wounding one of them with the dagger he himself fell there after receiving nine wounds from the three. Several *Aḥadīs* and men of the *Amīru-l-umarā* came forward and killed those victims. One of the Rājpūts turned to Shaikh Farīd with a drawn sword. The Abyssinian slave of the latter advanced and knocked down that Rājpūt. This tumult took place in the courtyard of the Daulat-Khāna-i-Khāṣs-o-'Āmm, and the punishment became a warning to many of the imprudent. 'Abdu-n-nabī Uzbak represented that, had such a case occurred under the Uzbaks, they would have extirpated the line and family of that party. I answered that, as these people were favoured and brought up by my great father, I would observe the same favour, and justice also requires that many should not be accountable for the fault and crime of one."[2]

The palace of Jahāngīr and some buildings of Akbar in the Fort were demolished by Shāh Jahān to make room for his marble edifices. The work is thus referred to by his court chronicler:—

"By orders of His departed Majesty[3] (may God enlighten his reason), a Jamshed

[1] *Lit.* "chief of the nobles" was the title of Sharīf Khān, the Prime Minister.

[2] *Tuzuk*, pp. 12-13.

[3] MS. *'arsh āshiyānī* (*lit.* heaven-nestled), a title given to Akbar after his death.

in dignity, at the place of the old citadel which had been built of brick and mud and had become ruinous from age, the experienced masons and magical mathematicians laid in the year 972 of the lunar era, and in an hour favourable for the success of such work and its durability, the foundations of an exalted fort, which will until the Resurrection tell of the sublimity of the pillars of the late Akbar's power, and the height of the foundation of its founder's fortune. In A.H. 980 (A.D. 1572) was finished this heaven-like building—circuit 3,000 imperial yards, breadth of wall at the bottom thirty and near the battlement fifteen, height from bottom to top sixty, consisting of twenty bastions

'Its bastions are all celestial constellations.[1]

'You would say it is the second sphere of Zodiac signs'

and of four gates, each of which has reared its top to the sky and opened the door of fortune to the world. From the bottom of the wall to the top the red hewn stones have been joined so closely that a keen eye cannot discern its joints.[2] By the command of His Majesty (Akbar) were built in that heaven-like fort lofty buildings of red stone for royal residence. As in this everlasting reign the demand for arts has a different market and the Divine care has adopted a new method of embellishing the world, at the place of the old have been built sky-touching mansions of marble which reflect like the mirror of Alexander[3] and are pure like the heart of the austere, and which are so well furnished, that they astonish the travellers of the world, as we shall describe later on. Although the cost of the building has not been mentioned in the *Akbar Nāmah*, in Jahāngīr's Memoirs it is written that 35 lakhs of rupees was spent on it. It is very probable that this amount was spent on the fort and those buildings alone which were finished inside the fort during the reign of His departed Majesty Akbar."[4]

It was in the first year of his reign that S͟hāh Jahān ordered the erection of the Chihl Sutūn, or a hall[5] supported on 40 pillars, in front of the *Jharoka* of the Daulat-K͟hāna-i-K͟hāṣṣ-o-'Āmm.

Muḥammad Ṣāliḥ of Lahore, a contemporary historian, eulogizing it, says :—

" In short this hall of dignity and exalted assembly, which has actually been built by His Majesty (S͟hāh Jahān), is supported on 40 pillars extremely lofty and ornamental. Its ceiling and wall are painted with a variety of figures and pictures. On the three sides of it is a balustrade, with three passages, of pure silver and of the height of a man of middle stature called in the Hindī language a *kaṭahra*. At each entrance stand door-keepers, personifications of awe, and no one can venture to conceive in one's mind admittance without permission. In this hall none are admitted except the great *Amīrs*, servants and those whose *manṣab* is not less than two hundred. Outside this hall there is an extremely large square enclosed by a red stone *kaṭahra*, which is so coloured that the verses of the eloquent poets, compared with it, possess no elegance.

" Over it are stretched canopies of brocaded velvet and silk interwoven with gold. At the three entrances of it also stand door-keepers. Inside stand, according to their ranks, the quiver-wearing *Aḥadīs*, musketeers, some prominent attendants of *Amīrs* and

1 Here is a pun on the word *burj* which means a bastion as well as a constellation or Zodiac sign.

2 Cf. *Histoire Generale de l'Empire du Mogol depuis sa fondation*, par le Pere François Catrou (Paris 1705), pp. 72-3.

3 A mirror of polished steel, the origin of which is attributed to Alexander.

4 *Bādshāh Nāmah*, Vol. II, Pt. I, pp. 154-5.

5 Latif (*Agra*, p. 51) erroneously ascribes this hall to Aurangzeb.

those whose *mansab* is less than two hundred, and outside (stand) all the troops, infantry and servants of *Amīrs*."[1]

The court chronicler of S͟hāh Jahān speaks of this hall in the following words:—" This hall (*aiwān*), seventy-six yards long and twenty-five and a half broad, has been erected in the place of the cloth canopy which used to be stretched in front of the *Jharoka* of the Daulat-K͟hāna-i-K͟hāṣṣ-o-'Āmm in former days and even for a time in this everlasting reign, and on the spot of the wooden hall which also, though built under this very heavenly rule for the protection of the circle of this exalted assembly, was removed because it was not in keeping with these lofty buildings. It has been so well built of red stone, covered with shell-plaster by the labour of wonder-working mathematicians, that it excites the emulation of the dawn of morning and its other elaborate ornaments baffle description. It has raised its head to the girdle of the Gemini and the arch of the Pleiades.

The curve of its lofty arch, like the new moon,
Owing to its height touches the sky.
When its roof raised up its head
For the earth it became another heaven."[2]

The arcade round the court of the Dīwān-i-'Āmm here is extant, while that at Lahore and Dehli has disappeared. Such arcades were lent on occasions of festival by the Emperor to his nobles who vied with each other in their decoration. Bernier, speaking of the arcade in the Dehli fort, says:—

" As to the arcade galleries round the court, every omrah had received orders to decorate one of them at his own expense, and there appeared a spirit of emulation who should best equip himself to the monarch's satisfaction. Consequently all the arcades and galleries were covered from top to bottom with brocade, and the pavement with rich carpets."[3]

The *Jharoka* of the Dīwān-i-'Āmm, which was built by Akbar,[4] was rebuilt by S͟hāh Jahān. "The *Jharoka*", says his court chronicler, "of the Daulat-K͟hāna-i-K͟hāṣṣ-o-'Āmm was not previously so elaborately ornamented. In this august reign, when all the abominations have escaped into non-existence, and lovely things reached the zenith of perfection, it was built of white marble, its four[5] walls being inlaid with precious stones of various colours and the ceiling embossed with gold and made a counterpart of the roof of heaven. The *Chīnī K͟hāna* (niches) of this embellished balcony, wherein are laid vessels set with precious stones, is the embodiment of the world-illuminating morning, and behind the *Jharoka* is a chamber facing the Daulat-K͟hāna-i-K͟hāṣṣ[6] with the ceiling and walls of red stone, the whole of this part being polished like mirror with the plaster of Paṭyālī, which is better than shell-plaster in polish and smoothness."[7]

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[1] *'Amal-i-Ṣāliḥ* (MS. in the Public library at Lahore), fols. 112-13.

[2] *Bād͟shāh Nāmah*, Vol. I, Pt. II, pp. 235-36; see also *ibidem*, Vol. I, Pt. I, pp. 222-23; *A.S. R.*, Vol. IV, p. 144, and *Archæological Survey of India, Annual Report* for 1902-3, pp. 220-21.

[3] *Travels in the Mogul Empire*, translated from the French by Irving Brock (London 1826), Vol. I, pp. 307-8.

[4] *Bād͟shāh Nāmah*, Vol. I, p. 221.

[5] More properly three, on the west being only two pillars.

[6] Now called the Dīwān-i-K͟hāṣṣ.

[7] *Bād͟shāh Nāmah*, Vol. I, Pt. II, p. 236.

The Daulat-K͟hāna-i-K͟hāṣṣ referred to in the above passage is thus spoken of by the court chronicler in connection with S͟hāh Jahān's visit to the Agra Palace in the tenth year of his reign :—

" From the Daulat-K͟hāna-i-K͟hāṣṣ-o-'Āmm the Emperor went to the Daulat-K͟hāna-i-K͟hāṣṣ and enlightened its buildings, which had been erected according to the royal order at the time (A.H. 1045, A.D. 1635) when the land of the Dakkan was illuminated with the *māhc͟hah*[1] of the country-conquering flags. After a moment he honoured with his presence the exalted *Harem*, the majority of whose buildings were recently finished. One of the edifices of the Daulat-K͟hāna-i-K͟hāṣṣ is a *tambī-k͟hāna* of marble, in length 15 *gaz* and breadth 9 by the imperial yard which is 40 fingers (put breadthways) long. The wall of this chamber was decorated with various paintings and adorned with gold. On the two sides of it are situated in extreme beauty two royal seats, each with a semi-globular ceiling, which has been decorated with various pictures and other ornaments. Although the ceiling of this chamber has, with a view of lightness, been covered with wood, yet on the face of the wood have been placed silver leaves, and the relief in gold executed in such a way that one would say that these are the rays of the sun emitting from the morning-light or the rays of the cup of Jamshed[2] glittering on a bed of camphor. In front of it is a hall, raising its head to Saturn, which has been built in entire marble with double pillars, in length 26 yards and breadth 11, in the place of the old hall in a new style which astonishes the critics (*lit.* the fastidious). The middle of the dado of this hall is embossed, the borders are inlaid with cornelians and corals, and the ceiling[3] is like that of its *tambī-k͟hāna*.

What a happy palace that for its elegance
Is to the world the prototype of the exalted Paradise.
In gracefulness and decoration
You would say it is a heaven on earth."[4]

The double-pillared hall or Dīwān-i-K͟hāṣṣ mentioned above has the following Persian inscription on its south wall :—

ازین دلکشا قصر عالي بنا   سر اکبر آباد شد عرش سا   (عثمان)
بود کنگرش از جبین سپهر   نمایان چو دندان سین سپهر
سجود در این سراے سرور   کند سر نوشت بد از جبهه دور
شرافت یکے آیه درشان او   سعادت در آغوش ایوان او   (ابوبکر)
ره جور از بیش و کم بسته است   بزنجیر عدلش ستم بسته است
بنازم بزنجیر کز عدل شاه   همه چشم شد در ره داد خواه
بر احوال مردم چنان بر حساب   که داند چه بینند شبها بخواب   (الله محمد)
در ایوان شاهي بصد احتشام   چو خورشید بر چرخ بامدام
چو ایوان او عالم آراے شد   سرخاک از و آسمان ساے شد

[1] *Māhchah, lit.* little moon, a small gilded globe or crescent on the top of a flag-spear.
[2] MS. *Jām-i-Jam* (also called *jām-i-jahān-numā* and *jām-i-getī-numā*), the cup of Jamshed with geometrical lines on it, by means of which he foretold the future events of the whole world.
[3] The date of the present marble ceiling is unknown.
[4] *Bādshāh Nāmah*, Vol. I, Pt. II, pp. 236-8.

شهنشاه آفاق شاه جهان   که نازد باو روح صاحب قران   (عمر)
باین رونق و زیب و زینت مکان   ندیده بروے زمین آسمان
بود صحن بامش چو سیماے مهر   بزیرش فتاده چو سایه سپهر
بتاریخش اندیشه اورد رو   در فیض شد باز از چار سو   (علی)
چنین گفت طبع حقایق شناس   سعادت سراے و همایون اساس

"The erection of this delightful lofty palace
Has exalted Akbarābād to the '*arsh* (ninth heaven).
Its pinnacle against the face of the sky
Appears like the indentations of the (letter) *sīn* of سپهر.
Prostration on the threshold of this abode of pleasure
Effaces evil destiny from the forehead.
Nobility is but one verse in his praise.
Fortune is a companion of his palace.
The path of tyranny, great or small, he has closed.
With his[1] chain of justice he has tied oppression.
I am proud of the chain which for the justice of the king
Has become a watchful eye in the path of the oppressed.
So well aware is he of people's circumstances
That he knows what they see in a dream.
In the palace of sovereignty in manifold splendours
May he continue for ever like the sun in the sky.
When his palace adorned the world,
The face of earth with it was exalted to heaven.
Shāh Jahān is the Emperor of the world,
With whom the soul of the Ṣāḥib-qirān (Tīmūr) is well pleased.
A building thus embellished and adorned
The sky has not seen on the face of earth.
The court of its roof is like the face of the moon.
The sky lies beneath it like a shadow.
My thought turned to devise a date for it.
The gate of inspiration opened (on me) from all sides.
Thus said my penetrating genius:
Sa'ādat sarāi wa humāyūn asās
(a happy abode and an auspicious foundation)."[2]

It was in this Dīwān-i-Khāṣṣ that Shāh Jahān's mortal remains were shrouded and put in a coffin. The event is thus related by Muḥammad Sāqī Musta'idd Khān:—

"Early on the night of Monday, the 26th of Rajab (A.H. 1076, October, A.D.

[1] Laṭīf has wrongly *its* instead of *his*, and is hence led to suppose that the chain of justice was tied in the Khāṣṣ Maḥall, on the walls of which he erroneously says these couplets were inscribed (*Agra*, pp. 83 & 84).

[2] *Cf. Transactions of the Archæological Society of Agra* (January to June 1874), pp. 18-19; Latīf, *Agra*, pp. 83-5. In the space after the 1st, 4th, 7th, 10th, and 13th couplets are inscribed respectively the names 'Uthmān, Abū Bakr, Allāh Muḥammad, 'Umr & Alī. The chronogram gives A.H. 1045 and not 1046 as given by Laṭīf (*Agra*, p. 85, note).

1665), His Majesty's disease (strangury) went from bad to worse and the enlightened soul of that exalted Emperor flew away to the garden of Paradise.

"After this inevitable event Ra'd Andāz Khān, Khwājah Buhlūl, Sayyid Muḥammad Qinnaujī and Qāḍī Qurbān came by orders of Her chaste Majesty, the Begum Ṣāḥib Jahānārā, to the Ghusl-Khāna, set themselves to shroud and furnish (the dead body), and carried out the coffin from the gate of the Burj-i-Muthamman (octagonal tower) of the Fort. Hoshdār Khān, the Ṣūbahdār, accompanied them. They passed the coffin from the water of the Jumna and carried it to the mausoleum of the great Mumtāzu-z-zamānī, which had been erected by the mason of His Majesty's magnanimity. After saying prayers they laid him inside the dome by the mercy of God."[1]

The court chronicler continues his description of the buildings of Shāh Jahān's Palace in the Agra Fort and says:—

"Under this building (Dīwān-i-Khāṣṣ) there is a delightful, exalted and strong chamber,[2] the door and wall of which are in some places adorned with glass-mosaics and in others with gold and a variety of colours. This chamber has two reservoirs, one is filled by a falling sheet of water which flows by a canal, 10 yards long and one broad, into the other reservoir larger than the first. The court of the said hall (Daulat-Khāna-i-Khāṣṣ) is 41 yards long and 29 yards broad, and has under it chambers wherein is the treasure of Ashrafīs (gold mohurs). In the west of the said court is a platform of white marble, on which the Emperor sits in the evening and night time. It overlooks the ground court[3] which is 66 yards long and 55 broad. In the east of it (the court of the Dīwān-i-Khāṣṣ) is the throne of touchstone[4] overlooking the river Jumna. On the three sides of the lower court have been built lofty stone edifices and offices, wherein is chiefly the treasure of precious gems and fine instruments set with precious stones. To the south of this (lower) court is an umbrella-like embossed pavilion of white marble on four pillars in extreme elaboration and purity. In this pavilion the golden throne, exalted like the seventh heaven, is honoured by His Majesty's seat on it. Opposite to the hall of the Daulat-Khān-i-Khāṣṣ there is a hall, 25 *gaz* by 5½ *gaz*, adjacent to which is a *ḥammām* (bath) consisting of several buildings, which overlooks the river Jumna, the garden at the foot of the *Jharoka-i-darshan*, and all other gardens on the other side of the water. The magical workmen and wonder-working artists have so well executed, on its interior and exterior, inlay, relief, glass-mosaics and other wonderful works, that it is a stumbling-block for the sight of the far-seeing fastidious persons. In the centre of the large chamber there is an intricate reservoir like the mirror of the pure heart of the enlightened,

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[1] *Maāthir-i-'Ālamgīrī* (Bib. Ind.), p. 53.

[2] Now called the Shīsh Maḥall.

[3] Now called the Macchī Bhawan.

[4] It was made at Allahabad and brought to Agra by orders of the Emperor Jahāngīr, as will be seen from the following passage from the *Tuzuk*:—"Daulat Khān, who had been already sent to Allahabad to fetch the black stone throne, paid homage to the Emperor on Wednesday the 4th of the month of Mihr (A.H. 1019, A.D. 1610), and brought the throne safe and sound. Verily it is a curious slab of stone. Owing to its extreme blackness and brilliancy many are of opinion that it must be a kind of touchstone. Its length is $3\frac{7}{8}$ yards (*dar'ah*), breadth $2\frac{1}{2}$ yards and one *tassū*, and thickness three *tassūs* ($\frac{1}{8}$ yard). I ordered the proficient sculptors to engrave suitable verses upon its four sides. They have also made feet for it of the same stone. I often sit on this throne." *Tuzuk*, p. 85. For the inscription and other details see the *Transactions of the Archæological Society of Agra* (January to June 1874), p. 21; *A. S. R.*, Vol. IV, pp. 132-5; *A. S. B. Proceedings* (Nov. 1874), pp. 210-12; Keene's *Handbook to Agra*, p. 18; *N.-W. P. Gazetteer*, Vol. VII, p. 694, and Laṭif's *Agra*, pp. 87-9.

with fountains playing on all sides. On the river side of the dressing rooms, and the cold and hot bathrooms, the Aleppo glasses have been so disposed that the river and the said gardens are all in view. The arches and doors of the *hammām* have with Aleppo glasses added to the beauty of other wonders.

" In the reign of His departed Majesty (Akbar), on the S͟hāh Burj which is adjacent to the Daulat-K͟hāna-i-K͟hāṣṣ there was a small marble pavilion with a chamber of the same stone in front, excepting which no other building had been built of marble. In the reign of His departed Majesty [1] (Jahāngīr) marble halls were built on the three sides of it. As the said buildings were not liked by the critical disposition of the world-maintaining and art-spreading Emperor (S͟hāh Jahān), who by the blessing of his world-embellishing intention

Painted anew this old vault
And built the world,

they were demolished in this august reign, and a new marble building, extremely delightful, was made, consisting of an octagonal chamber [2] with a diameter of eight yards, the five sides of which overlook the river and are adorned, well-painted and delightful. In the three west sides of it are three recesses (*lit.* royal seats) of extreme beauty, and in front of it is a hall with three archways. The whole of this building in and out is inlaid with various stones. Between the palace and the S͟hāh Burj are situated two *tambī-k͟hānas* adorned with a variety of gold paintings, and separated by a marble chamber open on two sides, which has also been painted with gold. The blessed bed-chamber [3] (*Ārāmgāh*), which is the source of prosperity and object of blessings, is a marble chamber 26 yards in length and 10½ in breadth. Its walls up to dado and pillars are covered with reliefs, and the marginal lines inlaid with a variety of stones; its ceiling, delightful like the *mufarriḥ-i-bahramānī*,[4] has also work in relief covered with gold. At the back of the exalted Ārāmgāh is a marble *tambī-k͟hāna*, 15 yards in length and 8½ in breadth, whose ceiling and wall are in colour like the wall of the bed-chamber, and with figures and pictures are a model of the celestial constellations. On two sides of this *tambī-k͟hāna* are two royal seats. Midway between this auspicious building and the S͟hāh Burj is the blessed *Bangla-i-Dars͟han* [5] of marble, which is the rising place of the sun of caliphate, adorned with paintings in gold. On its roof the gold plates [6] have been so used

'That the people are misled to think of two suns.'

" In the court of the exalted Ārāmgāh, which is eighty yards square, is a tank fifteen yards in length and nine in breadth, with five fountains playing in it:

A resplendent tank like the table of mind,
Impression-receiving like the mirror of intellect.
Its water is in purity like an eye,
In each drop of it is the brilliancy of hundreds of gems.

Before it is a water-fall and in front a garden [7] like Paradise, whose four plots are

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[1] MS. *Jannat-makānī* (*lit.* Paradise-placed), a title given to the Emperor Jahāngīr after his death.

[2] Now called the Mut͟hamman Burj.

[3] This bed-chamber with its *Tambi-k͟hāna* is now called the K͟hāṣṣ Maḥall.

[4] A species of exhilarating medicine, in which rubies (*bahramān*) are an ingredient.

[5] *Lit.* the *pavilion of appearance.* It was so named because the Emperor showed himself from it to the public each morning.

[6] Correctly speaking gilt copper-plates.

[7] Now called the Angūrī Bāg͟h.

full of various kinds of flowers and odoriferous herbs. Its centre platform and parterres have all been made of marble. Now I describe the Paradise-like buildings of Her exalted chaste Majesty, the Queen of the world, the Begum Ṣāḥib. By the side of the heaven-exalted Ārāmgāh there is a hall (*aiwān*) with a variety of painting and of extreme beauty and elaboration, the counterpart of the building which is situated between the Shāh Burj and the blessed Ārāmgāh. Behind this hall is the *tambī-khāna*, which is painted like the east hall. In the court of these buildings is a Bangla overlooking the river Jumna, the counterpart of the blessed Bangla (mentioned above). On two sides of this Bangla are two beauty-imparting rooms. The walls, ceiling and pillars of the Bangla and both rooms are gilt with gold and painted. The roof of these three buildings is adorned with gold-plates.

So long as the natural law for the earth is to be at rest,
So long as the institute for Time is to roll on,
May the latter invoke blessing on him,
And the former kindly say, amen!
May the world and age be his slave!
May God be his support and the heaven his helper."[1]

The mosques in the Fort still remain to be described. The Jāmi' Masjid of Shāh Jahān, popularly known as the Motī Masjid or Pearl Mosque, stands outside the north gate of the Dīwān-i-'Amm courtyard. It was built in the 26th year of his reign at a cost of three lakhs of rupees. It has been fully described by several writers.[2] The Masjid, says Fergusson, "must be seen to be appreciated; but I hardly know, anywhere, of a building so perfectly pure and elegant, or one that forms such a wonderful contrast with the buildings of Akbar in the same palace."[3]

It was this Motī Masjid which the Emperor Shāh Jahān came to see from Delhi in the beginning of A.H. 1064. The following full account of His Majesty's visit is given by Muḥammad Ṣāliḥ of Lahore.

"As the capital of Akbarābād had not for a long time gained the fortune of prosperity and purity by the blessing of the favour-bestowing visit, His Majesty started in a boat in that happy direction in an auspicious hour on Friday the 29th of Dhu-l-ḥijjah after the lapse of two *pahars*[4] and four *gharīs* (*i.e.*, in the afternoon), in order to see the Jāmi' Masjid, which had been by the exalted order finished entirely in marble in the fort of that city in the course of seven years, at the cost of three lakhs of rupees, towards the end of the 26th year of the august reign corresponding with A.H. 1063, and after performing his journey by stages he made the Palace of the capital a source of blessings and centre of eternal prosperity on the 16th of the sacred month[5] of Muḥarram, A.H. 1064. Towards the close of that day he went to the said mosque. That sacred building which is the most useful of lasting gifts, and is, according to the explicit texts of the Qurān and the Muhammadan law, the cause of the firmness of the

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[1] *Bādshāh Nāmah*, Vol. I, Pt. II, pp. 238-41.

[2] *The Oriental Annual*, by Thomas Bacon, F.S.A. (London 1839), pp. 131-6; *A. S. R.*, Vol. IV, pp. 147-54; *Handbook for visitors to Agra*, pp. 22-3; *N.-W. P. Gazetteer*, Vol. VII, pp. 690-91; Latif, *Agra*, pp. 90-94.

[3] *History of Indian and Eastern Architecture* (London, 1876), p. 600.

[4] One *pahar* is equal to 3 hours, and one *gharī* to 24 minutes.

[5] The months of Muḥarram, Rajab, Dhu-l-qa'dah and Dhu-l-ḥijjah were called *ḥarām* (unlawful), because fighting was prohibited during them.

basis of Faith, and of securing palaces and edifices in Paradise, consists of three domes, each 9 yards in diameter, 21 archways in three rows and six towers surmounted by octagonal kiosks each four yards in diameter. This is a building raised on a basement, the cause of whose foundation is the sacred verse, "He alone builds mosques of Allāh, who believes in God and the Last Day."[1] Its length is 56 yards, breadth 21 (yards), and the height of its plinth from the marble court is one yard. On the north and south of it are two *tambī-khānas* (parlours), each 17 yards in length and $3\frac{1}{2}$ in breadth. On the bright front of this sacred edifice, which has opened the gates of prosperity on the people of the world like the bright forehead of morning, and which, in elegance being like the concave curve of the face of the crescent of the 'Īd,[2] presents itself to our eyes in extreme beauty and delightfulness, is an inscription composed of mosaics of black marble, as if the *bismi-l-lāh* of the *Fātiḥah*[3] of righteousness were written on the margin of the sun with the musk-coloured ink of the pen of art. Emulous of its brightness which glitters with the light of grace on the elegant forehead of men of sanctity and purity, the eyes of the sun and the moon have become affected with the disease of cataract and flux of water by the nail of the crescent and the pencils of the rays (of the sun). The pious, whose forehead becomes bright by bowing on this heaven-exalted threshold, will, like the open countenance of the sun, never see (even) in a dream the wrinkle of sorrow and dust of gloom, and the needy one, whose hands are lifted towards heaven, will have in that august building his present and future hopes realized on the (mere) movement of the lip of his mouth. Without exaggeration we may say that the silvery cup of its graceful dome, from the excess of its brightness and glitter resembling the fountain of the sun, has added to the grandeur of the nine gilt vaults (heavens). The purity of its doors and walls, which are spotless like a polished mirror, leads the pupil of the eye at the moment of beholding to astonishment. Its strong columns, each of which may serve for a base of the nine gilt domes (heavens), are firm like the pillars of the perspicuous religion (Islām), and its strong pillars, which are from top to bottom heart-alluring like the fair, are throughout firm and durable like the principles of the religion of the head of apostles (Muḥammad). In the centre of its courtyard, which is eleven yards high from the level of the ground, and the floor of which, paved with marble, is 60 yards square, an ornamental marble tank, $10 \times 10 \times 2\frac{1}{4}$ yards, has spread like the disc of the sun the wave of its light to the height of heaven above. In the centre of the tank a running marble fountain has reared its head to the sky like answered prayers from a pious mind. Verily this *Ka'bah* of eternal blessings is the world-seeing eye of the face of earth in respect of its spotlessness and purity, and this delightful tank for diffusing a fine light is the eye of that place of eternal bliss. The pupil of the chaste eye of spiritual beings has learnt the prescription for the happiness of souls from the face of its delightful courtyard, and the spiritual mysteries are revealed to our eyes from the face of its Paradise-like ground which, paved with marble, has reached to the heaven of fixed stars. On the three sides of that pure courtyard there are delightful cloisters of

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[1] *Qurān*, chap. IX, 18.

[2] Name of two Muhammadan festivals on the 1st of Shawwāl and the 10th of Dhu-l-ḥijjah, called respectively the 'Īdu-l-fiṭr and 'Īdu-ḍ-ḍuḥā.

[3] *Fātihah* (*lit.* opening) is the first chapter of the Holy *Qurān*. It is preceded by the general formula "bismi-l-lāh-i-R-Raḥmān-i-R-Raḥīm," *i.e.*, in the name of God the compassionate, the merciful.

marble. Beneath it is situated a two-storeyed building of red stone facing outwards. The height of the plinth of the cloisters from the courtyard of the mosque is $\frac{5}{8}$ yard. In the north and south there are two lofty gates, each measuring internally four yards square and covered with a vaulted roof, which has a dome of marble surmounted by three marble turrets with gilt pinnacles. The east gate, the interior of which as far as the dome is of marble, measures 6 yards square and has two-storeyed delightful chambers surmounted by ornamental *guldastahs* (flower-pinnacled shafts) with gilt pinnacles. In front of the three gates are situated two seats (*aiwān*) of extreme beauty and diligence. It is hoped that the reward for this place of worship, which is the means of imploring gratification of our desires and wishes from the court of the Bestower of bounties, will revert to the auspicious reign of His exalted Majesty."[1]

The inscription in black marble referred to in the above passage reads as follows :—

این کعبهٔ نورانی و بیت‌المعمور ثانی که صبح در جنب صفائی آن شامیست تیره و خورشید از فرط ضیاے آن چشمیست خیره کرسی پایدارش باساق عرش همدوش و گنبد فیض بارش بارواق فردوس هم آغوش بنیان عالیشانش تبیان لمسجد اسس علی التقوے و ذروهٔ سپهر اقرانش ترجمان فاستوے و هو بالافق الاعلی هر گلدسته اش دسته نوری با نوار کواکب بسته یا فواره فیضی از چشمهٔ آفتاب جسته هر کلس زرینش شمع فروغ بخش قنادیل آسمانے هر محراب نور آگینش هلال نوید رسان عید جاودانی بر اطرافش قلعهٔ لعل فام مستقرالخلافت اکبرآباد که بازمردین حصار سبع شداد پیوسته گوی هاله است دور بدر منور که بر فیضان سحاب رحمت برهانے است مبین یا دائره است گرد مهر انور که برتر شح امطار کرامت نشانے است متین همانا بهشتی قصرے است والا از یک لولوی لالا که از سرآغاز معمور دنیا مسجدے سراسر از سنگ مرمر مصفا عدیل آن بروے کار نیامده و از بد و ظهور عالم معبدے سراپا منور مجلی نظیر آن جلوه ظهور نداده بفرمان خاقان سلیمان احتشام و سلطان خلیل احترام چهره افروز مسلمانی بانی مبانی جهانبانی شهنشاه عرش بارگاه ظل‌الله خلائق پناه موسس ارکان خلافت مرصص بنیان عدل و رافت بیمن قدمش زمین را بر آسمان هزاران ناز و از فور نعمش آسمان را با زمین فراوان نیاز بخت و دولت را از عشق خدمتش دوام بیداری ملک و ملت را با جمال طلعتش کمال هوا داری باد بهشت از خاک درگاه فلک جاهش دریوزه گرے آتش دوزخ از آب شمشیر دشمن کاهش وظیفه خورے

بنائے ملک را زو استواری — اساس عدل را زو پائداری
مدام ازچشمه تیغ ظفر خیز — کنـــد پیمانـــهٔ کفار لبریز
جنابش رافلاک خدمت‌گذارے — جبینش را سحر آئینه دارے

قطب آسمان دین پروری و شریعت نوازی مرکز دوران عدل گستری و مملکت طرازی ابوالمظفر شهاب‌الدین محمد صاحبقران ثانی شاهجهان پادشاه غازی بنا یافته و در عرض هفت سال بصرف سه‌لک روپیه او اخر سال بیست و ششم جلوس اقبال مانوس مطابق سنه هزار وشصت و سه هجری پیرایه انجام در بر و تاج اختتام بر سر گرفته ایزد بیهمال بمیامن نیت حق طویت این بادشاه دین پناه همگنا نرا توفیق اداے طاعات و اقتناے حسنات روز افزون کناد و اجر دلالت و هدایت آنرا بروزگار فرخنده آثار این حق گزین حقیقت آگاه عاید گرداناد آمین یا رب‌العالمین ٬

"This bright *Ka'bah* is the rival of the heavenly tabernacle ;[2] compared with its

[1] *'Amal-i-Sālih.* (MS.), fol. 540.
[2] MS. *Baitu-l-ma'mūr*, *lit.* the crowded house, so called because of its being full of visiting angels at every moment, is the *Ka'bah* of angels in the heaven built over against the *Ka'bah* of Mecca.

brightness morning is like a dark evening, and the sun owing to its brilliancy is like a dazzled eye. Its durable plinth is as high as the leg of the Divine throne, and its benefit-showering dome is arm-in-arm with the portico of Paradise. Its sublime foundation is the expounder of the verse, 'verily a mosque founded on piety,'[1] and its sky-touching top is the interpreter of the verse, 'And he appeared and he was in the highest horizon.'[2] Each of its *guldastahs* is like a brilliant cluster made of the lights of stars, or like a benificent fountain fed by the spring of the sun. Each of its gilt pinnacles is like a candle imparting light to the heavenly chandeliers. Each of its bright arches is like a crescent which conveys tidings of an eternal 'Īd. Around it lies the red fort of the capital of Akbarābād, which reaches to the emerald-coloured castle of seven heavens. You would say it (the fort) is a halo round the shining moon, which is a conspicuous sign of the rain-fall from the cloud of mercy, or is a circle round the bright sun which is a sure mark of the fall of rains of munificence. Verily it is an exalted palace of Paradise made of a single resplendent pearl,[3] because, since the beginning of the population of this world, no mosque, pure and entirely of marble, has appeared as its equal, nor, since the creation of the universe, any place of worship, wholly bright and polished, has come to view to rival it. It is built by the order of the Emperor (S̲h̲āh Jahān), a Solomon in state, a K̲h̲alīl [4] in reverence, the face-brightener of Islām, the founder of kingdom, king of kings with an *'ars̲h̲*-exalted court, the solder of the foundation of justice and mercy. By the blessing of his footstep the earth indulges itself in thousands of boastings over the heaven, and owing to the plenty of his favours the heaven is subordinated unto the earth. Prosperity and wealth are always vigilant for love of his service. Religion and state are in a fast friendship with the beauty of his countenance. The breeze of Paradise craves the dust of his heaven-exalted court. The fire of hell is fed with the glitter of his enemy-destroying sword.

> To him owes the fabric of kingdom its strength.
> To him owes the foundation of justice its durability.
> Ever from the fountain of his victorious sword
> He fills the measure of infidels (*i.e.*, terminates their lives).
> Heaven is a servant of his court,
> Morning is a mirror-holder to his face.

"He is the pole of the heaven of the defence of religion and faith, the pivot of justice and sovereignty, Abu-l-muẓaffar S̲h̲ihābu-d-dīn Muḥammad Ṣāḥibqirān-i-T̲h̲ānī S̲h̲āh Jahān Pāds̲h̲āh G̲h̲āzī. This building wore the dress and crown of completion in the course of seven years, at a cost of three lakhs of rupees, towards the end of the twenty-sixth year of the prosperous reign corresponding with the year of the Hijra one thousand and sixty-three. God grant us all daily-increasing facilities for prayers and acquisition of virtues by the blessings of the sincere intentions of this King, the defender of faith; God revert the reward for guidance to the auspicious reign of this pious and intelligent Emperor. O Lord of the universe. Amen!"[5]

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1 *Qurān*, chap. IX, 109.
2 *Qurān*, chap. LIII, 7.
3 Hence the popular name Motī Masjid or Pearl Mosque.
4 The prophet Abraham was entitled K̲h̲alīlu-l-lāh or the Friend of God.
5 *Cf. A. S. R.*, IV, pp. 154-6; Laṭif, *Agra*, pp. 91-4.

In the north-west corner of the upper gallery of the Macchī Bhawan courtyard stands a small but beautiful mosque called the Nagīnah Masjid. A still smaller mosque known as the Mīnā Masjid is situated by the side of the Dīwān-i-Khāṣṣ towards the south. Both these mosques were meant for the ladies of the *Harem*. One of them at least, if not both, was built by Shāh Jahān, as will be seen from the following passage :—" About two hours (*sā'at*) before the dawn of morning the Emperor awakes from his sleep and in early rising tries to surpass the luminous sun. At that very time, which is the best of the hours of day and night to receive the everlasting (Divine) favour, he performs ablutions, prepares for the worship of the true God and goes to the mosque which has been built in the private apartments (*khalwatgāh*) of the land of Akbarābād. Ready for the worship of the true God, he sits, with his face turned towards the *qiblah* on the prayer carpet, till the time for morning prayers comes."[1] Of Shāh Jahān's palace in the Agra Fort Fergusson writes as follows :—

" Nowhere is the contrast between the two styles more strongly marked than in the palace of Agra—from the red palace of Akbar, with its rich sculptures and square Hindu construction, a door opens into the white marble court of the hareem of Shah Jehan, with all its feeble prettiness, but at the same time marked with that peculiar elegance which is found only in the East. The court is not large, 170 ft. by 235 ft., but the whole is finished with the most elaborate care. Three sides of this are occupied with the residences of the ladies, not remarkable for size, nor, in their present state, for architectural beauty ; but the fourth, overhanging the river, is occupied by three white marble pavilions of singular elegance * * * *

" As in most Moorish palaces, the baths on one side of this court were the most elegant and elaborately decorated apartments in the palace. The baths have been destroyed, but the walls and roofs still show the elegance with which they were adorned.

" Behind this, in the centre of the palace, is a great court, 500 ft. by 370 ft., surrounded by arcades, and approached at the opposite ends through a succession of beautiful courts opening into one another by gateways of great magnificence. On one side of this court is the great hall of the palace—the Dewanni Aum—208 ft. by 76 ft. supported by three ranges of arcades of exquisite beauty. It is open on three sides and with a niche for the throne at the back * * * * *

" Behind it are two smaller courts, the one containing the Dewanni Khas or private hall of audience, the other the hareem. The hall in the former is one of the most elegant of Shah Jehan's buildings, being wholly of white marble inlaid with precious stones, and the design of the whole being in the best style of his reign.

" One of the most picturesque features about this palace is a marble pavilion, in two stories, that surmounts one of the circular bastions on the river face, between the hareem and the Dewanni Khas. It looks of an earlier style than that of Shah Jehan, and if Jehangir built anything here it is this."[2]

Aurangzeb, who kept Shāh Jahān in custody in this fort for eight years (A.D. 1658-65), appears to have made no additions. Muḥammad Hāshim, entitled the Khāfī Khān

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[1] *'Amal-i-Ṣāliḥ*, fol. 112 ; Laṭīf (*Agra*, p. 94) says that the Nagīnah Masjid was founded by Aurangzeb, but quotes no authority.

[2] *Indian and Eastern Architecture*, pp. 590-1. The Shāh Burj, as we now see it, was built by Shāh Jahān and not by Jahāngir, as Fergusson suggests.

(the clandestine lord), who resided at Delhi during the latter part of his reign, where he compiled his history, speaks of the Fort in the following words:—

"As the Agra Fort, built (repaired?) by Sikandar Lodī, had been made of stone, brick and mortar, His departed Majesty (Akbar) commenced the building of a red stone fort, an exalted marble mosque and another delightful edifice in the eleventh year of his reign which is A.H. 973.[1] It was completed in A.H. 980 and is a memorial of that monarch. It cost twenty lakhs of rupees. (Its dimensions are as follows:) circuit 3,000 yards, height 30 yards, breadth of wall 10 yards, width of trench 30 yards, depth 12 yards Sikandarī.[2]"[3]

Jean Baptiste Tavernier who left Agra for Bengal on the 25th of November 1665 writes of this fort as follows:—

"The first Gate where the Governor of the Palace lies, is a long blind Arch, which leads you into a large Court all environ'd with Portico's; like our *Piazza* in *Covent-Garden*. The Gallery in front is larger and higher than any of the rest, sustain'd by three ranks of Pillars, and under those Galleries on the other side of the Court, which are narrower and lower, are little Chambers for the Souldiers of the Guard. In the midst of the large Gallery, is a Nich in the Wall, into which the king descends out of his *Haram* by a private pair of Stairs, and when he is in, he seems to be in a kind of a Tomb. He has no Guards with him then, for he has no reason to be afraid of anything; there being no way to come at him. In the heat of the day he keeps himself there only with one Eunuch, but more often with one of his Children, to fan him. The Great Lords of the Court stay below in the Gallery under the Nich all the while.

"At the farther end of this Court is another Gate that leads into a second Court encompast with Galleries, underneath which, are little Chambers for some Officers of the Palace. The second Court carries you into a third, which is the King's Quarter. *Cha-jehan* had resolved to cover with Silver all the Arch of a Gallery upon the right-hand. And a French-man, *Austin de Bordeaux* by name, was to have done the work: but the King not finding any one in his whole Kingdom so capable, as the *French*-man was to treat with the *Portugals* at Goa about some important affair he had at that time; the design was laid aside: For they being afraid of *Austin's* Parts, poison'd him upon his return to *Cochin*. This Gallery is painted with branch'd-work of Gold and Azure, and the lower part is hung with Tapestry. There are several doors under the Gallery that lead into little square-Chambers; of which we saw two or three open'd, and they told us all the rest were such. The other three sides of the Court lie all open, there being nothing but a single Wall, no higher than for a man to lean over. On the side that looks toward the River there is a *Divan*, or a kind of out-jutting Balcone, where the King sits to see his Brigantines, or to behold his Elephants fight. Before the *Divan* is a Gallery, that serves for a Portico; which *Cha-jehan* had a design to have adorn'd all over with a kind of Lattice-work of Emraulds and Rubies

[1] It is evidently a mistake, since Abu-l-Fazl, Albadāonī, Farishtah and 'Abdu-l-Ḥamīd all agree in giving the date of commencement as A.H. 972.

[2] Till the thirty-first year of the Ilāhī Era the Iskandarī *gaz* of Sulṭān Sikandar Lodī, 32 digits in length, was used for cultivated lands and buildings, and the Akbar Shāhī *gaz* of 46 fingers as a cloth-measure. Seeing the inconvenience caused by the variety of measures, the Emperor introduced a medium *gaz* of 41 digits into general use and named it the Ilāhī *gaz*. Āin, Translation, Vol. II, p. 61.

[3] *Muntakhabu-l-lubāb* (Brit. Ind.), Vol. I, p. 165.

that should have represented to the life Grapes when they are green, and when they begin to grow red. But this design which made such a noise in the World, and requir'd more Riches than all the World could afford to perfect, remains unfinish'd; there being only three Stocks of a Vine in Gold, with their leaves, as the rest ought to have been; and enamel'd in their natural colours, with Emralds, Rubies and Granates wrought into the fashion of Grapes. In the middle of the Court stands a great Vat to bathe in, 40 feet in diameter, cut out of one entire grey-stone, with steps wrought out of the same stone within and without."[1]

Of later buildings, one popularly but erroneously called the *Mandir* (temple) deserves notice, for it is a memorial of the supremacy of the Jāṭs in the eighteenth century. It is situated north of the Macchī Bhawan, with a courtyard in front enclosed on three sides by cloisters. The following Persian inscription on its north façade shows that it was built by Rājā Ratan:—

هوالكافي

بسم‌الله الرحمن الرحيم

چون زمهاراج پرتهي اندر شجاع ‏ ‏ گشت اين قلعه روشن و زيبا

عادل و اعتضاد راجه رتن ‏ ‏ نين سكهه فوجدار اهل سخا

خانه‌بهجت سراے حسب‌الحكم ‏ ‏ كرد تعمير خوش نشان بقا

باد منكوب دشمن باني ‏ ‏ دولت انديش سينه شاد و صفا

دوش هاتف نظير جنت را ‏ ‏ بامكان خجسته داد نشان

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"**He is Sufficient.**

In the name of God the Compassionate, the Merciful.
When by the presence of Mahārāj Prithī-Indra Shujā'[2]
This fort was illumined and adorned,
The just and mighty Rājā Ratan,[3]
Nain Sukh Faujdār, the generous,
Built according to orders this abode of pleasure—
A happy monument of immortality.
May the enemy of its founder be crest-fallen!
May his well-wisher be cheerful and happy of mind!
Last night the crier (angel) pointed out
This *happy building* for the rival of Paradise."[4]
A.H. 1182 (A.D. 1768).

The later history of the Fort till its occupation by the British in A.D. 1803 is not of much importance, but before leaving the subject it would perhaps be advisable

[1] *Six voyages of Jean Baptiste Tavernier* (made English by J. Phillips, London, 1678), Pt. II, Book I, Chap. VII, p. 49.

[2] Probably Nawāb Shujā'u-d-daulah (Elliot's *History of India*, Vol. VIII, p. 223) is meant, and Prithī-Indra is a mere appellation signifying the Indra of the earth.

[3] Elliot's *History of India*, Vol. VIII, p. 365.

[4] The chronogram does not appear to be by a man of learning. Besides the several defects of language and verse the words مكان خجسته, and not بامكان خجسته, should have given the date required.

to explain the purposes for which the Palace buildings were used by their founder Shāh Jahān. His court chronicler speaking of the manner in which His Majesty divided his time goes on to say:—

"About two or three *gharīs* after sun-rise the Emperor puts forth his mercy-crowned head through the window which is called in the Hindī language the *jharoka-i-darshan*. The people make obeisance and their temporal and spiritual desires are gratified. He sits here often for two *gharīs*, and sometimes more or less than this according to the quantity or scarcity of state affairs, and the rise or fall of the cheerfulness of his disposition. The object of the institution of this mode of audience, which originated with His departed Majesty Akbar (enlightened be his reason), is that the majority of subjects may by their presence at the rise of the sky-adorning sun and the appearance of the world-conquering luminary (the Emperor) receive first of all, without any obstacle or hindrance, the blessing of light and the light of the (royal) favour in this space, which is large like the mind and hand of the generous; that the harassed and oppressed may freely represent their wants and desires; and that the administrators of justice may grasp the substance of a case and lay it before His most holy Majesty in the Daulat-Khāna-i-Khāṣṣ-o-'Āmm or the Khalwat-Khāna, which is known as the Ghusl-Khāna and which the world-conquering Emperor (Shāh Jahān) has named the Daulat-Khāna-i-Khāṣṣ as will be mentioned, to enable him to make a personal enquiry and decide it according to the illustrious (Muhammadan) Law.

"In this very space pass before the most holy (royal) eye the furious wild man-killing elephants which it is quite unsafe to bring in the Daulat-Khāna-i-Khāṣṣ-o-'Āmm. It is also in this large space [1] that the elephant fight which is peculiar to the kings of India and worthy of the amusement of exalted sovereigns is arranged. No doubt, without such a large space the combat of such a pair of demon-countenanced mountain-shaped (beasts) cannot take place. During their fight and pursuit a world is trodden under the hands and feet of the two four-pillared Bisutūns.[2]

Time by the two combating elephants
Kills on the spot a world like a gnat.

"Although the ancient kings of India attempted to breed mountain-moving, line-breaking elephants, yet the individuals of this species, excellent in quality as well as in size, which have been produced in this exalted reign, together with perfect individuals of all other animal life, have never in any age been heard of, much less seen. Sometimes, according to the cheerfulness of the (royal) disposition, as many as four or five pairs are set to fight. In this very space the mountain-shaped and wind-like-fleet elephants are caused to run after horses that the former may get accustomed to attack brave horsemen in battles. In the same large area His Majesty reviews horses of the victorious armies and the contingent troops of *amīrs*. From this

[1] Here it was that on the 29th of Dhu-l-qa'dah, A.H. 1042, took place the combat of two royal elephants, one tusked called the Sidhkar and the other untusked named the Ṣūrat Sundar. In the course of the fight the beasts get apart to renew the struggle with fresh vigour. But instead of turning to its adversary the Sidhkar attacks Aurangzeb and rolls down the prince and his horse. The prince, then only fifteen, stands firm and fights with the Sidhkar. An interesting account of it is given by the court chronicler of Shāh Jahān (*Bādshāh Nāmah*, Vol. I, Pt. I, pp. 489-93). Many eulogies were written on the occasion. A manuscript copy of the one composed by Abū Ṭālib Kalīm is with the writer.

[2] *Bisutūn, lit.* without pillar, is the name of a mountain in Persia.

noble place (*jharoka-i-darshan*) the Emperor goes to the *jharoka* of the Daulat-Khāna-i-Khāṣṣ-o-'Āmm, which is of extreme beauty and purity with carpets on its floor, covered by a portico of cloth for protection from the sun, and the rain, and enclosed on three sides by a balustrade 50 yards long and 15 broad with three entrances. The people gain the fortune of *Kurnish* [1] (salutation) and realize their objects. The exalted princes stand on the right and left, and sit down when so ordered. The majority of servants gain the honour of standing at the foot of the window (*aiwān*) with their backs towards the balustrade, and some, who are distinguished by a closer connection, (stand) on the right and left of that exalted chamber in order of ranks. The administrators stand in front of the *jharoka* in order of rank, and lay before His most holy Majesty the political and financial affairs. The requests of *mansabdārs* are presented by great Bakhshīs.[2] Many are honoured with services and additions (to their pays or ranks); some, who come from different provinces and parts of the royal dominion to the '*arsh*-exalted court, gain the fortune of admittance; and a number, who are appointed to the governorships of provinces and other services, obtain permission and through the *Mīr-ātish* (Master of ordnance), the *Musharraf* (clerk) of artillery, the *Bākhshīs*, the *Aḥadīs*, and the matchlockmen pass before the royal sight which is effective as alchemy. Such of them as deserve favour are pointed out. The ministers of His Majesty's own affairs, such as the *Mīr Sāmān* (Head steward) and *Dīwān-i-Buyūtāt* (minister of the household ?), present to His most holy Majesty various requests. The Emperor gives each such an extempore reply as astonishes the Mercury-like [3] *Wazīrs* and the experienced old *Bitikchīs*.[4] The presents and petitions of exalted princes, governors of provinces, *Faujdārs*,[5] *Bakhshīs* and other administrators are laid before His Majesty by the favourites of the court. The petitions of the heaven-exalted gems (*i.e.*, princes) and nobles of the kingdom are perused by the Emperor himself, and the purport of the applications of other servants is represented to him by certain functionaries. The Prime Minister (*Ṣadr-i-Kul*) of the Empire lays before His Majesty a part of petitions forwarded by other ministers, which are worthy of the royal notice. He reports the wants and circumstances of those deserving maintenance such as *sayyids* and *shaikhs*, the learned and the righteous. The requests of this class of people are complied with, and each receives in order of merit an amount in cash in His most holy Majesty's presence. A special functionary presents to His most exalted Majesty reminders about *manṣabs*, *jāgīrs*, amounts in cash, cases of finance and cash-keepers and other royal orders. The servants of stables pass horses and elephants before the blessed (royal) eye according to the usual custom. The regulation for mustering animals [6] and refunding [7] money received from the Government for their food in case of their wretched

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1 For regulations regarding the *kurnish*, see *Āīn*, Translation, Vol. I, pp. 150-60. *Sijdah* (prostration) was maintained during the reigns of Akbar and Jahāngīr, but on the accession of Shāh Jahān it was his first order to abolish it and allow instead of it the *zamīnbos* (kissing the ground) which was in its turn repealed in the tenth year of his reign and a fourth *taslīm* introduced. *Bādshāh Nāmah*, Vol. I, Pt. I, p. 110; Vol. II, p. 237; *Āīn*, Translation, Vol. I, p. 213, note 2.

2 *Bakhshī*, a general or commander-in-chief, who is also the Paymaster.

3 It means clever like the planet Mercury, which is called the *Munshī-i-falak* (the scribe of the heaven), because it is supposed to exert a propitious influence on letters.

4 *Bitikchi*, a word of Turkish origin, signifying a writer or scribe. For the function of the *Bitikchi*, see *Āin*, Translation, Vol. II. p. 47.

5 *Vide Āin*, Translation, Vol. II, p. 40. 6 *Ibidem*, Vol. I, pp. 213-6. 7 *Ibidem*, Vol. I. pp. 217-8.

plight and leanness, is one of the innovations of His late wise Majesty Akbar. The special functionaries bring before the royal sight, which is effective like alchemy, the servants of *amīrs* along with their horses which have been newly branded or subjected to the repetition of the mark,[1] with the object that in case they or their horses be in a wretched condition the *Tābīnbāshī*[2] should be liable to the royal reproach not to be again guilty of negligence. After four and sometimes five *gharīs*, according to the scarcity or quantity of requests and affairs of the servants of God, His Majesty goes from this place to the Daulat-Khāna-i-Khāṣṣ, where he honours the throne of prosperity. In the reign of His Majesty (Akbar), whose abode is heaven, between the Dīwān-Khana (hall of audience) and the royal *Harem* there was a room in which the Emperor used to bathe. In this place some courtiers (*lit.* adherents of the royal carpet) received admittance, and the *Dīwān* (Prime Minister) and the *Bakhshī* (Paymaster) also, being honoured by the royal presence, presented to the Emperor their urgent requests. In the course of time this Khalwat-kadah (private apartment), for the reason of having a *ḥammām* (bath-room) built near it, became known by the name of the Ghusl-Khāna, and so it was on the lips of the high and the low, but now it is called by the public the Daulat-Khāna-i-Khāṣṣ (private palace) as the most holy Majesty (Shāh Jahān) has named it. In this place he writes replies to certain urgent petitions in his own blessed hand. In reply to some requests made to His most exalted Majesty through the *Wakīl*, *Wazīr* or officers in charge of presenting petitions of the *Ṣūbahdārs* (governors) the eloquent secretaries write inevitable orders, as these issue from the inspired (royal) tongue. These orders, when finished, receive the honour of the revision of the prudent and careful Emperor, who makes corrections if there be any mistakes in language or omission of matter. Of the fortunate princes, he who is *ṣāḥib-i-risalat*[3] writes on the back of the inevitable (royal) order and seals it. At the bottom of the letter the *Dīwān* adds his own signature. The orders, inevitable like Destiny, are then sent to the sacred *Harem* to be ornamented with the splendid exalted seal, which is with Her Majesty of high birth, Mumtāzu-z-zamānī (Tāj-Maḥall). In this *Khalwat-kadah* the great ministers present affairs relating to royal *jāgīrs* and pays of officials, and dispose of them. Moreover the Prime Minister lays before His most holy Majesty the requests of the needy, and the pious Emperor makes them prosperous by granting, according to merit, land to many, money to some, daily expenses to others, and others again he relieves from indigence by throwing into the skirts of their demand alms, sums of money from the gold treasures, or bestows upon them a (rich) woman. A part of the time he spends in seeing the works of exalted magical artists such as lapidaries, enamellers, etc. The superintendents of the work of royal buildings in consultation with the wonder-working rare masters lay before the critical (royal) eye designs of edifices. The royal mind, which is illustrious like the sun, pays full attention to lofty edifices and strong buildings, which, according to the saying 'verily our relics tell of us,' speak for a long time with a mute tongue of their master's high magnanimity and sublime

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[1] *Vide Āīn*, Translation, Vol. I, pp. 255-7.

[2] H. Blochmann in his note on the *manṣabs* says :—" The Mançabdárs are also called *tá'ínátiyán* (appointed) whilst the troops of their contingents are called *tábínát* (followers) ; hence *tábínbáshí*, the Mançabdár himself, or his *Bakhshī* (paymaster, colonel)." *Āīn*, Translation, Vol. I, p. 242.

[3] Probably one in charge of the royal correspondence.

fortune, and for ages to come are memorials of his abode and love of ornamentation and purity. The majority of buildings he designs himself, and in the designs prepared by clever masons after a long consideration he makes appropriate alterations and asks proper questions. On the approved design the strong pillar of state and firm arm of sovereignty, Yamīnu-d-daulah Āṣaf Khān (the Emperor's father-in-law), writes explanations of the holy (royal) orders for the guidance of masons and overseers of buildings. In this peaceful reign the work of building has reached such a point as astonishes the fastidious tourist and the magical masters of this incomparable art. Details will be given in their proper places and the pen be made a painter and the book painted. Sometimes birds and beasts of prey are brought before the exalted eye. For a short time the Emperor is occupied with the amusement of fairy-countenanced, mountain-shaped, wind-like-fleet, fiery-tempered, lightning-natured and *Burāq*[1]-born horses, which the skilful trainers gallop in the court[2] of the Daulat-Khāna-i-Khāṣṣ. Four or five *gharīs* of the day pass in these transactions. Notwithstanding that the Emperor of the age has appointed wise, intelligent and God-fearing men to the exalted posts of judges, ministers and superintendents of justice, on each Wednesday he rises without fail from the *jharoka-i-darshan*, and makes by his presence the Daulat-Khāna-i-Khāṣṣ an emulation-exciter of the exalted Paradise, in order to make an enquiry into the grievances of the broken-hearted oppressed persons. On that day of justice none are admitted but the ministers of justice, *Muftīs*,[3] several honest and pious scholars, and some *amīrs* who are constant attendants of the court. The ministers of justice call petitioners one by one before the Emperor and lay their cases before His most exalted Majesty. The Emperor, who is a protector of the oppressed and destroyer of tyrants, takes each case gently and cheerfully and orders according to the *fatwā* (sentence) of the (divine) doctors. If he punishes, he does so with the permission of the (Islāmic) Law. As for the suppliants from distant parts, whose cases cannot be decided but in their native land, the exalted orders are issued to the governors concerned that they should prudently and justly distinguish right from wrong, redress the grievance and administer justice to the oppressed, and that otherwise they should send the plaintiff and defendant to the court of justice and equity in the capital of Akbarābād, which is the head-quarter of the banners of glory. After finishing the transactions of the Daulat-Khāna-i-Khāṣṣ the Emperor goes to the Shāh Burj which in height reaches to the seventh heaven and in strength rivals the wall of Alexander.[4] In this exalted abode none but the fortunate and powerful princes and a few courtiers (*lit.* adherents of the royal carpet) are admitted without special permission, so much so that even the *Khidmatgārs* would not come in without orders, but rather delay the work they are entrusted with. His Majesty talks with the *Wazīr* on some state affairs, the disclosure of which is not advisable for the Government, and on the contents of orders, inevitable like Destiny, which should be written to the *amīrs* living at a distance, and which political interests cannot allow to be revealed. The urgent affairs relating to imperial lands and salaries of the *manṣabdārs*,

1 The celebrated animal smaller than a mule and bigger than an ass, which our Prophet rode on the night of his ascension to heavens.

2 Now called the Macchī Bhawan.

3 *Muftī* is one who pronounces a religious sentence.

4 This wall was built against the inroads of Gog and Magog.

which have not been laid before His Majesty in the Daulat-Khāna-i-Khāṣṣ, are presented by the *Wazīr* and disposed of. In this exalted abode of fortune the Emperor sits for two or three *gharīs*, and sometimes more in case of the pressure of work. About the mid-day His Majesty makes the auspicious *Harem* an emulation-exciter of Paradise by his august advent. As soon as the time for afternoon (*Ẓuhr*) prayers approaches, he performs his prayers and devotions and takes his food. That the affairs may be performed with a fresh brain and cheerful mind, he sleeps a little at noon according to the sublime habit of the Prophet, upon whom be noble blessings and salutations. Even in the sacred *Harem* the Emperor, unlike other negligent Kings, instead of indulging in carnal lusts and sensual pleasures, is occupied with granting requests of the poor. The chaste and innocent Satīyun-nisā Khānam who owing to her confidence, eloquent tongue, excellent service and noble etiquette is fortunate enough to serve Her Majesty of high birth, the Queen of the age, in the performance of urgent work and the transaction of business, always presents to that illustrious and chaste Queen the requests of the poor and helpless ; and that lady of the auspicious *Harem* lays them before the God-worshipping Emperor. A world thus realizes their objects. Poor women receive according to their condition land, daily allowance or cash. Some unmarried girls, who, owing to their poverty and indigence cannot afford necessaries of marriage, receive, according to their family and condition, ornaments, clothes, money and other things which are indispensable for the ceremony, and are married to their equals. Every day in this most sacred palace a considerable amount of money and ornaments is spent under this head. After the evening ('Ṣr) prayers His Majesty sometimes goes to the *jharoka* of the Daulat-Khāna-i-Khāṣṣ-o-'Āmm where blessed servants gain the fortune of performing the *Kurnish*. The public affairs are transacted according to the time available, and the *Kashikchis* (mounting guards), called in the Hindī language the *chaukīdārs*, hand over the *qūr* (armour).[1] His Majesty has the good fortune to say his sun-set (*Maghrib*) prayers with other men in the Daulat-Khāna-i-Khāṣṣ. After these prayers he is busy for about four or five *gharīs* in the management of state affairs in the same Paradise-like hall, which is resplendent owing to the abundance of camphor-candles in vases set with precious stones. In this pleasant building he sometimes attends to various melodies of songsters and musicians. The practice of the wise Emperor in this incomparable art, which is the sweetest pleasure and the most minute intellectual science, especially the Indian melody, has reached such a pitch that a higher degree is unimaginable. It is clear to all that beauty, especially when in possession of the merit of singing, has a great effect in ravishing a heart and exhilarating a mind, as for instance in case of indiscreet children. For this reason no nation is without music, so much so that the people of high mountains and inhabitants of forests and deserts have their own music. The amplitude of knowledge, abundance of delicate expressions, plenty of flowery meanings and delightful subjects, and representation of a variety of airs and glances as these are combined in the Indian music, not a hundredth nor a thousandth of them is found in other musics. In short, the beauty of the melody of India has conquered the world like the charm of its beauty. The foreign critics of music and slaves of beauty are captives of it.

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[1] *Āīn*, Translation, Vol. I, pp. 109, 257.

The ear becomes all eye when the singer appears in full.
The eye becomes all ear when the musician plays on the lute.[1]

"Many pure-hearted *Ṣūfīs*[2] and world-renouncing ascetics in the bountiful assembly of music and ecstacy have easily given their life to their Beloved (God) and handed with open countenance the trust of life to Him. A full account is not required, for it is widely known. After performing these things, the Emperor says his night (*'Ishā*) prayers and goes to the Shāh Burj. If there is any work which has not been done in the Daulat-Khāna-i-Khāṣṣ, he summons the Prime Minister and *Bakhshīs* and disposes of it. Being prudent and hardworking he does not put off the work of to-day till to-morrow, but (on the contrary) the work of to-morrow he does to-day and then goes to the auspicious *Harem* where he amuses his mind for two or three *gharīs* with hearing the delightful music, after which he puts his wisdom-fostering head on the pillow of sleep with a waking mind and vigilant intellect. That His Majesty may fall into a sweet sleep, the eloquent members of the assembly read behind the veil works on biography and history containing an account of prophets and saints and events of the reigns of old kings and emperors, which are memoirs of vigilance for the blessed who take warning and reminiscences of pardon for the enlightened who are fortunate, especially the Memoirs of Bābar and the Ẓafar Nāmah, which contains annals and conquest of the reign of His late Majesty the *Ṣāḥibqirān* (Tīmūr). The whole time of his pious sleep is about two *pahars*. His Majesty often says that it is a pity to pass in the sleep of negligence, as many unthankful imprudent persons and ungrateful body-pampering fellows do, the time which can better be spent in administering justice, nourishing people, performing urgent affairs of the world, granting requests of the poor, storing up means of God's pleasure and offering thanks for the gift of sovereignty."[3]

NŪR BAKHSH.

[1] Speaking of the singers of Shāh Jahān's reign Blochmann says :—"During Sháh-Jahán's reign we find Jagnáth, who received from Sháh-Jahán the title of Kabrái; Dirang Khán ; and Lál Khán, who got the title of *Gun-samundar* (ocean of excellence). Lál Khan was son-in-law to Bilás, son of Tánsen. Jagnáth and Dirang Khán were both weighed in silver, and received each 4,500 rupees." *Āin*, Translation, Vol. I, p. 613*n*.

[2] *Ṣūfīs*, an order of Muhammadan mystics.

[3] *Bādshāh Nāmah*, Vol. I, Pt. I, pp. 144-54.

GABRBANDS IN BALUCHISTĀN.

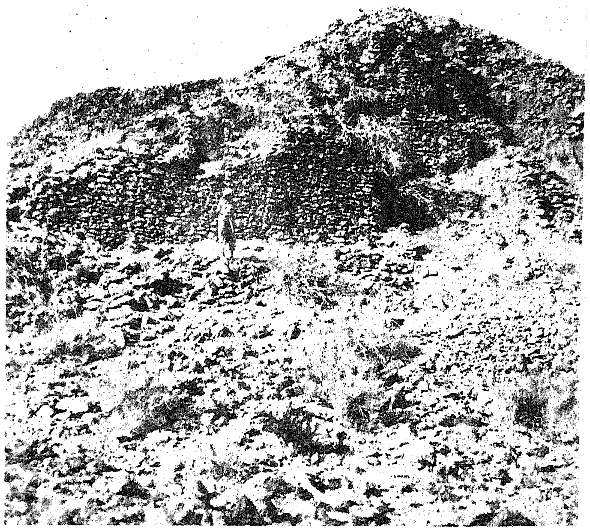
AMONG the most interesting antiquities of Baluchistān are the *Gabrbands*, or, as their name implies, the "Dams of the Zoroastrians or fire worshippers," which are to be found throughout the country lying to the south and south-west of Kalāt and also in Khārān. These curious structures are scattered in great numbers throughout the hilly Jhalawān country, from Sūrāb near Kalāt as far as the Ḥab river valley on the south and so far westward as Mashkai; but perhaps the most interesting examples are to be found in the Lakōryān and Sārūna valleys and in the valley of the Ḥab. Nothing, indeed, is more remarkable than the number of these dams, which are to be seen by a traveller passing through the Ḥab valley, as soon as he begins to leave the wider plains which occur at the southern end of its course. It would appear that, at one time, the whole valley was lined with the terraces formed by them, and they must have been constructed with enormous labour. There is no inlet or corner of the mountains which border the valley, where flood water would be likely to rush down after heavy rain, that does not possess its well-built dam of great stones, sometimes almost colossal in its size and strength. They are usually found in the narrow valleys, which now-a-days present a barren, stony appearance, and are always placed either on declivities or across the mouths of ravines, or where the valleys are wide, at right angles to the mountains, which surround them, and jutting out into the plain. Their solidity and size are proportionate to the steepness of the declivity, and so to the force of the floods which would descend after rain. Sometimes they are strengthened by buttresses or walls which support them. Those built across ravines are particularly solid and high, and advantage has been taken in many cases of the rocks at the side of the ravines to form a sort of foundation for the building. Where, however, there is only a gentle slope, they are narrow and low. A single dam seldom occurs, but several are generally found to have been constructed one below the other, so as to form a succession of terraces.

At the present time, some part of nearly every dam has been swept away, leaving open the mouths of most of the ravines, down which sweep the floods, caused by the occasional heavy storms occurring in these parts. These floods carry with them the loose gravel, rocks and shingle, which cover the mountain slopes, and leave nothing but barrenness behind. But unbreached dams are occasionally to be seen, and here the full effect of throwing these massive structures across the declivities and ravines can be realized; for, on the upper side, a fine plain is always to be found on which the

a



b



c



d



Photogravure. Survey of India Offices, Calcutta, May 1905.

(a.) AḤMAD GABRBAND.

(b.) BAHLŪR GABRBAND.

(c.) PĪR MUNAGHĀRA GABRBAND.

(d.) GABRBAND AT TORI-NA-THAR, KHIDRĀNI COUNTRY, KALĀT.

present inhabitants have, even now, some sparse cultivation. An instance of this kind is to be found at Pirr, not far to the south of Koṭīro in the Ḥab valley, and even more striking is the plain formed in the Gandav basin, between Sārūna and Qasimēji, by two dams on the east and west of the valley respectively. The dam on the east is fully thirty to forty feet above the surface of the ravine which originally took off the drainage. The Gandav basin is not less than a mile square, but, so great is the age of the embankment, that an alluvial deposit has now been formed over the whole area and reaches to within a few feet of the top of the dam. So largely, indeed, has the level of the valley been raised, that flood water is now taken off at a point to the north of the valley, which must have been far above the level of the surface, when the dam was first formed.

The country, in which these dams are built, obtains its water-supply from the occasional heavy storms, which sweep over it generally in July and August, and in a few minutes the water rushes off the hard rocky surface in devastating floods, in those places where there are no artificial means of retaining it. The total average rainfall at Kalāt is only about seven inches, and that in the Jhalawān country may be said, almost with certainty, not to exceed ten.

Several methods of construction appear to have been employed in erecting the dams. The most common form is a series of platforms, from 2 to 4 feet high, rising in successively receding steps, and gradually narrowing towards the top. Each of these platforms was made by the construction of two low parallel walls with roughly shaped stone, the blocks varying in size from a foot to two feet square, and the interval between the walls being filled with mud, rubble and gravel. The next platform is less wide, the decrease in size varying in different places; sometimes it is 8 feet narrower, *i.e.*, 4 feet on either side, sometimes it is only about a foot. On the upper side, *i.e.*, the side towards the declivity, from which the rush of water would come, the steps thus formed have been filled in, either naturally or artificially, by stones and rubble piled against them. This type of dam is very commonly met with in the Ḥab river valley. Part of the Pīr Munag͟hāra Gabrband has been constructed on this principle.

The second type is formed of very large slabs of stone which have been roughly shaped and are set together with great regularity, the larger chips, which were detached in dressing the stones, being used to fill in the interstices and to keep the boulders in position. Some of the boulders thus used are some 4′ by 2¼′ by 1¼′ in size. On the upper side of the boulders, thus placed in position, an additional breastwork was formed from the smaller chips of the stones, clay and rubbish. The most typical example of this kind is the Aḥmad Band in the Sārūna valley (*vide* Pl. LXI, and fig. 1).

A third type consists of a massive stone wall, supported by buttresses on the lower side and having a sloped breast-work on the upper. The dam at Pīr Munag͟hāra, in the Sārūna valley, is a good specimen of this kind (*vide* Pl. LXI).

The length of the dams varies with the width of the ravine or valley, across which they are constructed. Sometimes they are only a few yards long, and sometimes, as in the case of the Aḥmad Band, they run for half a mile or more.

It will be seen, therefore, that their construction was a work of immense labour, energy and ingenuity; one might almost say, of great engineering skill. It is also obvious that they have been constructed by a people other than those now living in

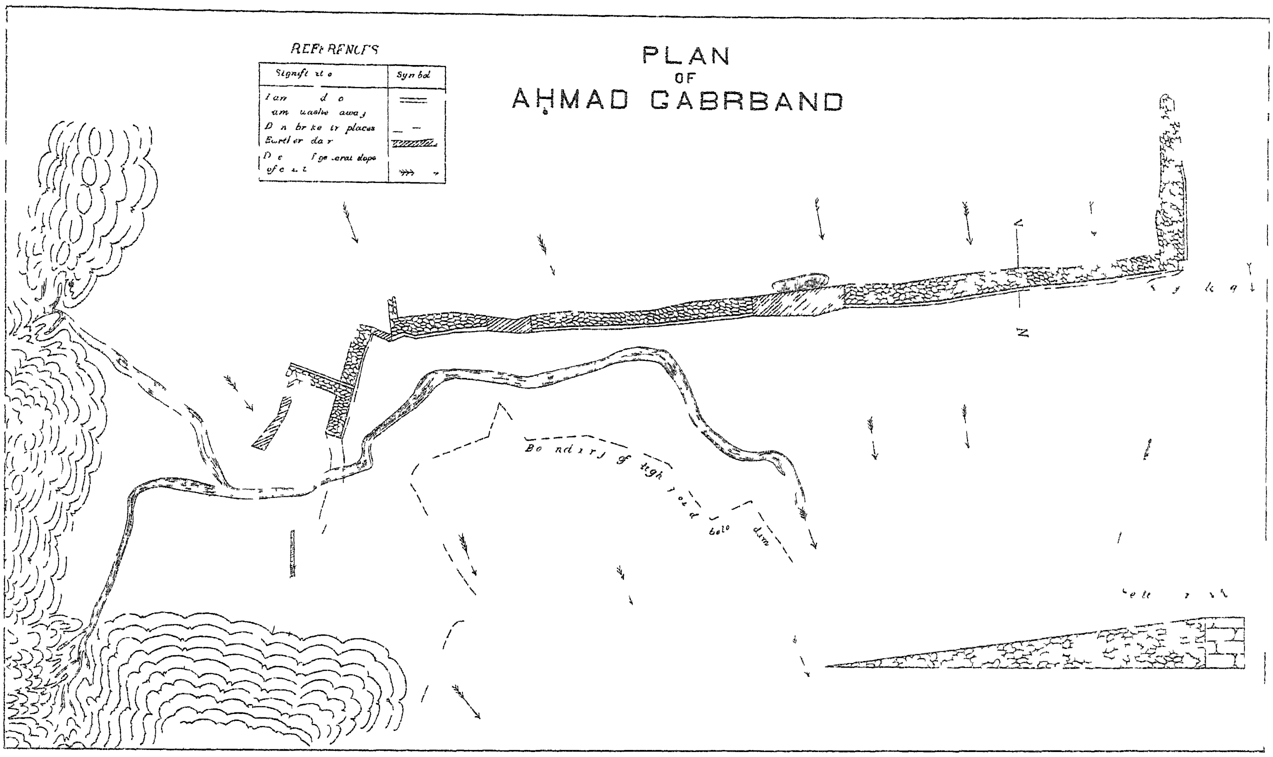
the country, for the latter are only now emerging from barbarism, and have no notion of the use of stone in building Even in cases in which small breaches have occurred in the ancient dams, and where they are still useful for purposes of irrigation and raising crops, the existing inhabitants only fill up the breaches with earth, and not with stones

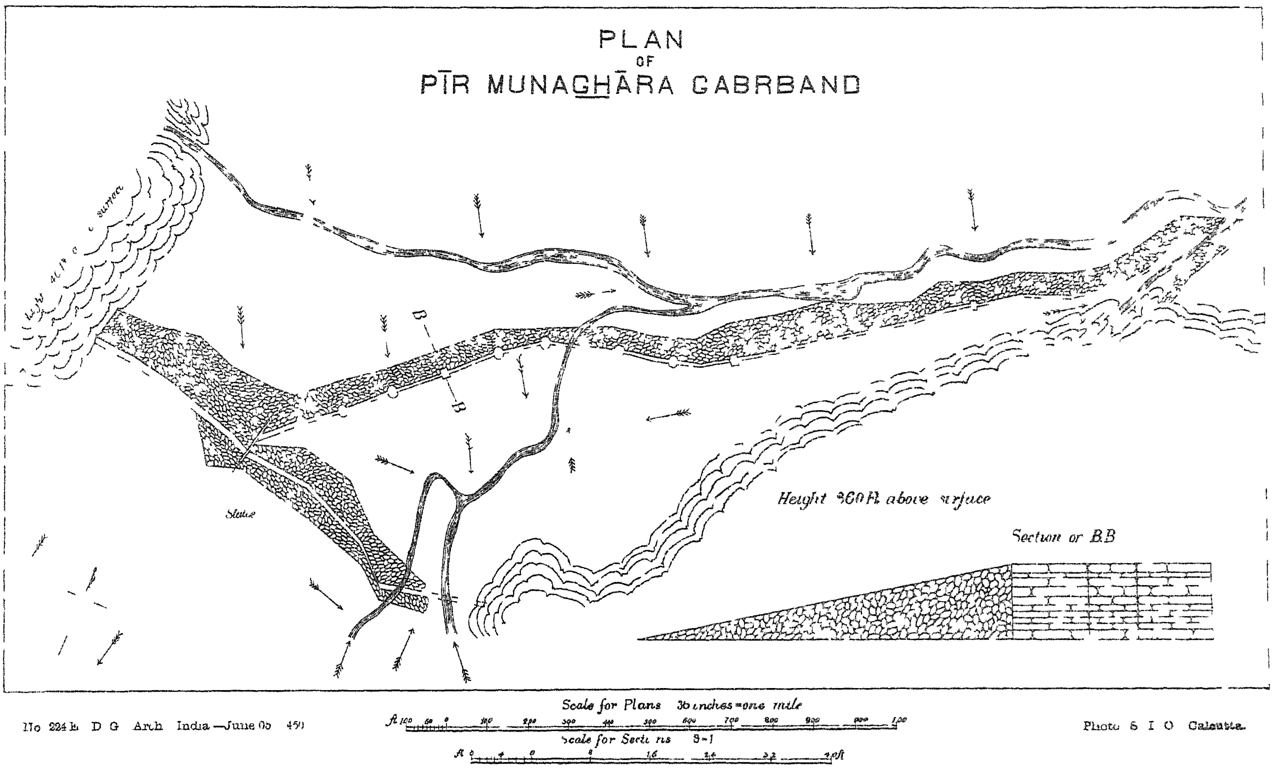
To turn now to a detailed description of some of the more important dams, which have been personally visited, the most important include a dam at the entrance of the Bahlūr or Bahlol valley, near Diwāna Thāna in the Ḥab valley, and the Ahmad and Pīr Munag͟hāra Gabrbands, in the Sārūna valley They lie a little more than a hundred miles from Karāc͟hi about 1,000 feet above sea level, the former in about 26° 5′ N, 67° 25′ E, and the latter in about 26° 20′ N, 67° 20′ E, and can easily be reached in the cold weather The Bahlūr valley is shown as Bhalûr on the 8-mile maps published by the Survey of India, the Sārūna valley is marked Sāran

The Bahlūr or Bahlol valley, which is in the Levy Tracts of Las Bēla, consists of a basin hemmed in by high mountains, and the whole of its drainage issues from a gorge on the west side, to join the Kinri river a little below At the point where the dam is situated, the gorge is 110 yards wide, and an attempt was evidently made, when the dam was constructed, to fill up the whole of the space intervening between the high rocky sides, which skirt the river bed Traces of the dam are visible on both sides, advantage having been taken of the natural rock, in both cases, to form a foundation for, and support to, the dam The breadth of that part of the dam, which is still standing on the right side of the stream, is 80 feet, and the height 70 feet, dimensions which indicate the vastness of the work It has been constructed with horizontal layers of stones brought from the neighbouring hills and mixed with mud and gravel; the whole appears to have been faced by large stones, some of which must have required several men to lift them (*vide* Pl. LX, *a*). On the upper side is a sloping breast-work The dam, after it had been built, appears to have been instrumental in collecting enough water to enable the residents to cultivate rice, a thing which is not now thought of, for the present inhabitants relate a story that, when their ancestors were digging for treasure long ago in the vicinity of the dam, they came across traces of rice-husks

Another dam, the size of which brings it into prominent notice, is that situated a little north of the Musefari Lak, near Koṭīro, in the Ḥab river valley. It has an average breadth of about 100 feet and its height is about 30 feet It is built on very stony ground, and many very large stones were used in its construction It has now been breached in the centre, and the ground above it, instead of being a fertile alluvial plain, is nothing more than a stony waste.

Even more remarkable, however, than the two dams just mentioned, are the Ahmad Gabrband, or Aḥmad Band, as it is locally called, and the dam near Pīr Munag͟hāra in the Sārūna valley The Ahmad Band lies some three or four miles to the south-west of the Mengal *thāna* at Sārūna, and a plan of it is annexed. It lies on the west side of the valley under the slopes of the C͟happar Hill The total length of the wall and breast-work, which are still standing, is 2,350 feet, and it will be seen that it is in two sections forming an obtuse angle, with a side dam at the eastern end. Each section is built at right angles to the general slope of the ground.





Scale for Plans 36 inches = one mile

Scale for Sections 8–1

No 224 E D G Arch India—June 05 491

Photo S I O Calcutta.

The dam originally extended up to the Chappar Hill, and its total length was 3,241 feet; but floods in the stream, which is shown in the plan, evidently carried away the portion shown by a broken line, which measures 508 feet. Parts of the dam have been washed away at other points and the breaches have been filled up with earth in modern times. The dam is composed of a wall 5′×6′-10″, made of massive stones on the lower side with a sloping breast-work on the upper. The measurements of the stone blocks are fairly uniform, their length varying from 3′-8″ to 3′-10″, their breadth from 18″ to 28″, and their depth from 12″ to 15″. They were evidently quarried on the trap hill at a place called Aḥmad Dhor, three or four hundred yards from the west end of the dam, but by what means they were brought down to the dam, no one can say. They were certainly dressed *in situ*, for the whole of the upper breast-work of the dam is covered with large and small chips. The rock, of which the blocks are composed, is readily fractured with any other kind of hard stone. Some of the larger chips were used for keeping the blocks in place in the wall by insertion in the interstices, and the illustration (Pl. LX, *a*) shows the regularity of the construction. The level of the ground on the upper side of the dam has been raised by constant alluvium several feet higher than that below the dam. There appears to have been a building measuring 19′×16′ at the eastern corner. No traces of metal were found on this or any other dam, nor does mortar appear to have been used in any case.

The Pīr Munaghāra dam differs both from the Bahlūr and the Aḥmad Band, and is more remarkable than either of them. A plan is attached, but unfortunately it does not show the whole extent of the dam. Slightly to the east of the extremity of the hill, which is shown on the east side of the plan, is a depression with a slope to the southward, and traces of the continuation of the dam are to be seen crossing this depression to another hill, lying north and south, and parallel to the hill on the extreme west of the plan. A very large area was thus enclosed, sufficient to form a vast reservoir. The Pīr Munaghāra dam, like the Aḥmad Band, was constructed in two sections, the style of building employed differing in each case. The section on the west, which is 1,166 feet long, consisted of a wall 15½ feet high rising in ten tiers, that at the top being 12 feet wide, and that at the bottom about 24 feet. On the upper side, a vast artificial breast-work of loose stones was constructed, the whole width of wall and breast-work amounting to 150 feet. In the centre are the remains of what was evidently a sluice or escape-channel, the course of which across the dam and breast-work can still be traced, though it has long since fallen into decay (Pl. LX, *c*).

But the force of the water coming from the slope of the hill on the south appears to have breached the eastern end of this original dam, and so the builders constructed another one, consisting of a buttressed wall and breast-work, which met the first at an obtuse angle close to the site of the sluice. The buttresses of the wall are circular in most cases, but rectangular in others. The circular buttresses have a radius of 8 feet, and an are measuring 28 feet. The rectangular ones are 10 feet square. Both kinds are built on each side of the wall, which is 6 feet thick (*vide* plan, section on B. B.). The blocks of stones used in making the wall were some of them as much as 4′ by 2′ by 4′. The whole length of the dam as reconstructed is 3,087

feet, but, as already explained, this does not include the portion on the east which does not appear on the plan. Such a work, though built without mortar, would do honour to the engineering skill of the present day.

What, it may be asked, were the uses to which these enormous dams were put? It has been suggested by some that they were defence works, by others that they were reservoirs, and again that they were the result of a systematic attempt at once to prevent denudation of the country, to form deposits of alluvial soil, and to retain the moisture brought by the heavy floods, which occur at such long intervals in this part of Baluchistān. The first theory hardly appears to merit serious consideration, for in a hilly country of this description the bottoms of ravines could at no time have



Fig. 1.

been capable, or in need, of defence. Moreover, the multitude and ubiquity of the dams prevent acceptance of this theory. Had they been situated only near some place of great strategical importance, the theory might hold good; but the dams, of which many hundreds are to be seen, are scattered in all directions and many of them are in positions which could be easily "turned."

In a few instances the object of construction may have been to retain the water as in a reservoir, and this seems to have been the case with the Pīr Munaghāra dam; but, in the great majority of cases, the object seems clearly to have been the formation of alluvial soil over the substratum of dry and barren rock, combined with the retention and economical control of the distribution of flood water. The dams in the Lakoryān valley indicate that the attempt was made systematically, the flood water, with the silt which it carried, being stopped on its first rush out of the ravines by strong stone embankments, and later on, as it spread out and its violence decreased, being merely

retained by smaller terraces. The latter could not have sufficed for regular *barrages* or tanks. The moisture, thus retained, must not only have enabled the inhabitants to cultivate the soil, but also to obtain a supply of drinking water from wells, a very important matter in this thirsty land. In support of this theory it may be remarked that, where the dams are still standing, large alluvial plains have been formed, but where they have been breached, the soil has eroded, leaving only the bare gravelly surface, of which the hills are composed.

Mr. Vredenburg, of the Geological Survey of India, who saw some *Gabrbands* near Zard in Khārān, considers that the soil of the plain formed by the dams, was brought from the plains below the mountains at immense cost of labour and carriage, and heaped against the dams.[1] Is it not also possible, as an alternative, that some of the silt which, in the ordinary course of detrition, would have reached the plains below the mountains, was held up by the dams and gradually formed the alluvial terraces above them? The circumstance of the Gandav plain, already quoted, with its deposit of silt of vast depth, does not, it would seem, bear out Mr. Vredenburg's theory. The question is capable of decision by microscopical examination of silt specimens.

Who, again, were the people who built the structures? The question is one which will, in all probability, never be satisfactorily solved. That they are of considerable age is evidenced by the depth of the alluvial deposits above those dams which are still standing intact. I have already referred to the Gandav valley, where the deposit caused by the dam must be quite 30 feet deep, and centuries must have elapsed to cause such an accretion. Again, the systematic construction of the dams and the skill with which they have been erected, in addition to their large numbers, indicate that their builders must have been accustomed to co-operation, that they were subject to direction, and that the persons who controlled the work had considerable engineering knowledge.

Persian Zoroastrians, Indian Buddhists, and Arabs appear to be the three agencies, to one of which their construction may be attributed, and the name given by the people of the country implies that the first-named were the people who constructed them. That the Arabs should have caused their erection does not seem to be probable; for the Arabs merely held the country by means of scattered garrisons, and do not appear to have brought large numbers of settlers with them. Elliot, in his *Arabs in Sind*, gives us to understand that they interfered little with the people of the country so long as their tribute and other taxes were regularly paid.

Indian Buddhists flourished in Baluchistān previous to the Arab invasion, and traces of them are to be found on both sides of the country of which I am now speaking, *viz.*, in Las Bēla, at Chhalgari in Kachhi, and at Alor near the present Rohri.[2] General Cunningham, too, identifies Lakoryān with one of the places mentioned by Hiuen Tsiang: but no evidence exists, as far as the writer is aware, as to whether they were the originators of these stupendous works.

It will be interesting, therefore, to see how far existing evidence supports the popular tradition of the present day, which attributes the dams to Persian Zoroastrians

[1] *Report on the Baluchistān Desert. Memoirs of the Geological Survey of India*, Vol. XXXI. Part 2.
[2] And generally throughout Sind. [Ed.]

of the pre-Muhammadan period. In the first place, it is a curious fact that no grave-yards are to be found anywhere in the neighbourhood of the dams. The people who built them must have been numerous, yet there are no traces of their burying places. In a dry and rainless country like Baluchistān, monuments last unimpaired for many centuries, and we have instances of very ancient grave-yards in places such as the locality known as *Turk-na-Hadirāghāk* (the burial enclosures of the Turks), near Akapaṭ at the head of the Sārūna valley, which show how little effect the local atmosphere has in causing the destruction of permanent monuments. The builders of the dams, therefore, may be presumed to have disposed of their dead otherwise than by burial. Now, in several places in the Sārūna valley, and between the Sārūna valley and Wīra Ḥab to the south, there are curious circular buildings made of rough stones. One of these, near Kapoṭo in the Sārūna valley, was examined and its inner circumference was found to be 135 feet; its diameter 42 feet; the outer circumference about 163 feet; the thickness of the wall 5 to 6 feet; and the height about 6 feet. On excavating the centre, slabs were found, the interstices between which had not been filled in. The slabs, which were laid horizontally, varied in thickness from 5 to 9 inches and in length from 1′-9″ to 3′-6″. The opinion, which is here hazarded, that these circular buildings may have been an early type of tower of silence (*dakhma*), used by fire worshippers, can only be tested by further exact examination, but it may be noted that the length of 21 feet from the wall to the centre would have admitted the placing of the bodies of a man, woman, and child in consecutive order, as is done in Bombay at the present day, and the stone slabs may have formed a primitive well or cesspool for leakage. It is to be regretted that more of these towers were not measured, to ascertain whether the measurements coincided in all cases.

At several places in the vicinity of the dams are to be found the sites of ancient towns. Examples of such sites may be seen in the Bahlūr valley, at Kapoṭo in Sārūna, and further north near Tangav Pīr. The buildings found on these sites are large and similar in construction to the dams; the walls are of considerable thickness, sometimes as much as 3 or 4 feet, and are well built without mortar and very strong. One of those on the site in Bahlūr, which, it may be noted, also contained a stone-lined well, was 78 feet long by 36 feet wide with a subsidiary building at the back, 24 feet square. At Kapoṭo in the Sārūna valley, a building was seen, consisting of a central hall with two passages on either side, each of which gave access to three side chambers. On several of the mounds a quantity of ceramic ware was seen, but it has not necessarily any connection with the earlier inhabitants, for, in former times, when the country was exposed to raids and forays, a single elevated site appears to have been built over again and again, owing to the security which its position afforded.

That the ancient Persians of the Zoroastrian period were capable of erecting very large irrigation works, is shown by the colossal remains at Shushta and other places on the Kārūn river in Persia, which are also called *band* and are known to have been erected by the followers of this religion. In Baluchistān all works of skill and magnitude are attributed to *Gabrs*, *i.e.*, Zoroastrians. There is still, for instance, in the Quetta valley, what is known as the *Gabrikārez* or under-ground water-channel. The marks of this *kārez* are to be seen extending over a considerable distance along

the east side of the valley. The wells have now fallen in, but experienced *kārez* diggers will tell one that, if a new *kārez* is excavated so as to reach the old *Gabrikārez*, a sufficiency, and even an abundance, of water is ensured. The use of the term *Gabr*, vague as it is, is of historical and folklore interest.

Turning to the historical evidence of the presence of the Gabrs in Baluchistān, we find that the Avesta mentions Pishīnanga, which is described as a *vara* (valley) in an elevated position and containing a *dasht* or waste plain, a description which tallies exactly with the Pishīn of the present day. Again, when Alexander crossed the Arabius and entered the country of the Oritae or Horitae (a people whom it may be possible some day to identify with the Horu clan of the Mīrāji Mengals living in the Sārūna valley), he found that they did not bury their dead, but threw them to the wild beasts.[1] Is this, possibly, an indication of the presence of Zoroastrianism close to the parts of which we are now writing? A recent discovery at a place near Bēla of some 150 Sassanian coins, dating from the early part of the seventh century, leads to the inference that Zoroastrianism, which reached its zenith under the Sassanian dynasty, continued to flourish in Las Bēla at a period shortly antecedent to the Muhammadan invasions. Along the south coast of Persia, too, and in Khārān, Zoroastrianism is known to have flourished up to the time of the Abbāsid dynasty, which commenced in 750 A.D. Ibn Haukal, who wrote in the 10th century, mentions that parts of Hind and Sind belonged to the *Gabrs*, and Sind at that time included Makrān and the Jhalawān country. So late as 1809, when Sir Henry Pottinger made his famous journey from Nushki to Bāmpur, he found in the western part of the province, near the river Bale (Bel), the ruins of what he believed to be Zoroastrian tombs or fire-temples.

A consideration of all these facts affords, it would seem, good ground for asserting that the ascription of these fine works, according to the traditions of the inhabitants, to the Zoroastrians is not contradicted by any local circumstances.[2]

E. HUGHES BULLER.

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[1] A similar custom prevailed in Bactra in Alexander's time; only that there the dying and not the dead were cast to dogs, which were reared for the purpose and locally known as "undertakers" (ἐνταφιασταί). Bactra was a well-known stronghold of Zoroastrianism. Strabo, 11, 517; Porph. *de abst.* 4, 21; *Journal of Hellenic Studies*, Vol. XXII, p. 271. [Ed.]

[2] In connection with these dams in Baluchistān, it is worth quoting the following passage from an article by Mr. R. N. Hall in the *Pall Mall Magazine* of Sept. 1905 regarding similar works in the Inyanga Range of S.-E. Zambesia. Speaking of the archæological remains there he says "But the most extraordinary feature of the Inyanga range is the vast number of very old aqueducts, some two miles in length, running from ancient dams on the mountain streams, and crossing from hill to hill in a most wonderful manner.

"Other features that strike the visitor to this region of mystery are what are known as Hill Terraces, and these are found in hundreds throughout Inyanga. These terraces covering the sides of the hills are mostly on their northern side. As many as forty terraces, one above and behind the other, are to be found on any one hill, and extending from base to summit. Most of these have earth behind them; but from the inner sides of many the soil has, in the course of ages, been washed away. They are retaining walls, and most probably were used for horticultural purposes. Their constructors were most probably Arabians, for in South Arabia similar hill terraces are also found." [Ed.]

IRRIGATION IN SOUTHERN INDIA IN ANCIENT TIMES.

THE prosperity in ancient times of an agricultural country like India may be judged at least partly from the quantity of grain produced in it and from the strength of the population which had to consume it. Of these two factors, the first must have depended greatly on the facilities afforded for irrigation, especially where the rainfall was precarious. These facilities, so far as they were artificial, would also be a rough indication of the extent to which kings and others in authority fulfilled their duties towards the cultivating classes. Tiruvaḷḷuvar, the well-known Tamil poet, has said: "If the heaven dry up, worship to the heavenly ones with due solemnity on earth will not be paid." "Neither almsgiving nor ascetic practices will abide in the wide world, if the sky dispense not its gifts." (*Indian Antiquary*, Vol. IX, p. 199.) These sayings prove how much people depend on rain in Southern India. The proverbial "three showers of the month" in the golden age appear to be more of a poetical invention than an actual fact. In Southern India agricultural settlements seem to have been made in the earliest times on the banks of rivers, wherever natural facilities for irrigation existed. As the population increased and localities far removed from rivers had also to be occupied and cultivated, the necessity for reservoirs to store up water for irrigation must have become pressing. That the construction of tanks was looked upon in later times as a meritorious work appears also from ancient inscriptions.[1] The distress caused by famine during periods of drought and the consequent loss of revenue to the king must have been more potent factors in the construction of tanks.

Perhaps the earliest South-Indian ruler[2] who realized the necessity of providing facilities for irrigation was the semi-mythical Cōḷa king Karikāla, who, according to Tamil literature (*Indian Antiquary*, Vol. XIX, pp. 331 and 339) and according to a number of inscriptions found in the Tamil and the Telugu country, constructed

[1] In the Vedic period irrigation by wells seems to have been frequent, though the word *sarāṁsi* (lakes or tanks) also occurs in the Ṛgveda (V, 29, 7 and VI, 17, 11). In later times tanks were also known. The religious merit derived from the construction of tanks is explained in chapter 58 of the *Ānuśāsanikaparvan* of the *Mahābhārata*. Manu (IX, 279) imposes capital punishment on a man who destroys the dam of a tank. The *Padmapurāṇa* has a special chapter on the consecration of tanks, while in the 13th century the construction of tanks was included among the seven acts of charity which were considered specially meritorious.

[2] The Junagadh inscription of the Kṣatrapa king Rudradāman (*Ep. Ind.*, Vol. VIII, p. 40) mentions a tank constructed during the reign of the Maurya Candragupta and perfected in the time of Aśoka. It was destroyed by a storm during the reign of Rudradāman (A.D. 150) and was restored by him.

embankments on both sides of the river Kāvērī (*Epigraphia Indica*, Vol. VII, p. 120, and *Annual Report* on Epigraphy for 1899-1900, paragraph 45), and converted its delta into a veritable garden. He is said to have ordered his tributaries to provide labour for this great undertaking.

So far as we know at present, it was the Pallava king Mahendravarman I. of Conjeeveram that constructed the first tank in Southern India (*Ep. Ind.*, Vol. IV, p. 153). He excavated the monolithic caves at Trichinopoly, Dalavāṉūr in the South Arcot district,[1] Vallam in the Chingleput district, and Śīyamaṅgalam and Mahendravāḍi in the North Arcot district. The reservoir built by him at the last-mentioned place exists at the present time, and the *District Manual of North Arcot* (Vol. II, p. 439) says of it:—"The tank must originally have been larger than that of Kāveripāk and served lands some 7 or 8 miles distant. The bund was enormously high, and might be restored to its original height, in which case a great extent of land could be brought under irrigation." The village of Mahendravāḍi is 3 miles east-south-east of Sholinghur Railway Station (Mr. Sewell's *Lists of Antiquities*, Vol. I, p. 162), on the Madras Railway between Arcot and Arkonam, and had, according to the Census of 1891, a population of 827. According to the inscription, which mentions the tank, Mahendravāḍi was a city, and the *District Manual* (Vol. II, p. 438) also says:—"It was once a large town and 3 miles east of it is Kīzhvīdi, so called because it originally formed the eastern street of Mahendravāḍi." The monolithic cave dedicated to the god Viṣṇu is expressly stated to have been excavated on the bank of the tank, which was called Mahendra-taṭāka, evidently after the king, and the village was known as Mahendrapura after him. Mahendravarman I. reigned about the first-half of the seventh century A.D. So the tank and the cave have been in existence from that time.

The next tank is mentioned in a copper-plate from the village of Kūram in the Chingleput district, 9 miles north-north-west of Conjeeveram (Mr. Sewell's *Lists of Antiquities*, Vol. I, p. 187). It was called Parameśvara-taṭāka and was evidently constructed by Parameśvaravarman, the great-grandson of Mahendravarman I. mentioned above, and was provided with a feeder-channel from the river Pālār. The land irrigated by the tank was divided into twenty-five parts, five of which were set apart for public purposes. In the village of Kūram there were at the time 108 families studying the four Vedas (*South-Indian Inscriptions*, Vol. I, p. 154). These gifts appear to have been made by Parameśvaravarman soon after his victory over the Calukya king Vikramāditya I., whose dates range from A.D. 655 to 680 (*Bombay Gazetteer*, Vol. I, Part II, p. 323). We may say roughly that this tank was built during the second-half of the seventh century A.D.

The village of Teṉṉēri, which is 11 miles east of Conjeeveram (Mr. Sewell's *Lists of Antiquities*, Vol. I, p. 188), was in ancient times called Tiraiyaṉēri and must have derived its name from the large tank on which it is situated (*Annual Report* on Epigraphy for 1900-01, paragraph 9). This tank is mentioned in the Kāśākuḍi copper-plates of the Pallava king Nandivarman (*South-Ind. Inscrs.*, Vol. II, Part III, p. 360), and was evidently built by a Pallava king or prince named Tiraiyaṉ, whose time is not known at present. Nandivarman was the opponent of the Calukya king Vikramāditya II.

[1] See my *Annual Report* for 1904-05, Part II, paragraph 3.

whose known dates range from A.D. 733-34 to 746-47. The reservoir at Teṉṉēri which is mentioned in the inscription of Nandivarman must have come into existence during the first-half of the 8th century A.D. at the latest.

The tank at Uttaramallūr in the Chingleput district, which is 10½ miles north-west of Madurāntakam (Mr. Sewell's *Lists of Antiquities*, Vol. I, p. 192) on the South-Indian Railway, must also have been built during Pallava times, though its construction is not specifically mentioned in any of the numerous inscriptions found at the place. In ancient times it was called Vayiramēga-taṭāka, apparently after the king during whose reign it was built and whose name or title was Vayiramēga. For removing silt in the tank provision was made by a private individual in the 9th year of the reign of the Pallava king Dantippōttaraśar (No. 74 of 1898). There is thus no doubt that the reservoir existed at the time of this Pallava king. The village assembly of Uttaramallūr accepted the endowment and undertook to arrange for the removal of silt every month from the tank. In an inscription of the 7th year of Dantivarman, who is probably identical with Dantippōttaraśar, a certain Brāhmaṇa purchased land for constructing a tank at Uttaramallūr (No. 80 of 1898). And it is not impossible that this refers to the Vayiramēga-taṭāka. Even if this should not prove true, the fact that the Vayiramēga-taṭāka is first mentioned in an inscription of Dantippōttaraśar may, at least provisionally, be taken to show that the tank came into existence during the reign of that Pallava king, and that Vayiramēga was one of his surnames.[1] His time is, however, not yet ascertained.

There are a number of records at Uttaramallūr which register endowments in favour of the Vayiramēga-taṭāka. Most of them belong to the Gaṅga-Pallava family, which succeeded the Pallavas in Southern India and continued in power from the decline of that dynasty in the eighth century until the rise of the Cōḷas about the end of the ninth. One of them (No. 61 of 1898)[2] is dated in the reign of Dantivikramavarman, identical with Dantiga, ruler of Kāñcī, from whom the Rāṣṭrakūṭa king Gōvinda III. levied tribute about A. D. 804.[3] The inscription states that certain ryots had failed to pay the dues on their holdings. The village assembly paid the amount for them and their land was taken over for the benefit of the tank for three years. If at the end of that period the defaulters should return and pay up all their dues they were to get back the land. Otherwise it would be sold for the benefit of the tank. If any man of Uttaramallūr objected to this course, his own land was to be sold similarly and the sale proceeds credited to the tank, while the man himself was to be dealt with as a village pest (*grāma-kaṇṭaka*).[4] If an arbitrator objected, he

[1] The Tamil scriptures of the Vaiṣṇavas known as *Nālāyiraprabandham* mention a Pallava king named Vayiramēga, but there is no clue as to the period when he lived. In his *Essay on Tamil Literature*, No. I, page 54, the late Professor Seshagiri Sastri of Madras concluded from this reference that the Vaiṣṇava Saint Tirumaṅgai Āḻvār must have flourished during the reign of the Toṇḍaimāṉ (*i.e.*, the Pallava king) Vayiramēga.

[2] This and other similar reference numbers are quoted from the *Annual Reports* of the Government Epigraphist.

[3] *Ep. Ind.*, Vol. IV, p. 181 and Vol. V, p. 159.

[4] *Grāma-kaṇṭaka* means literally "village thorn." So far as I know, the disabilities of this class of offenders are nowhere laid down. But it appears that the offence could be expiated by the performance of certain ceremonies [paragraph 63 (*m*) of the *Annual Report* on Epigraphy for 1898-99]. In treating of offences against agreements made by village corporations, Manu (VIII, 219f.) says: "If a man has sworn to observe the compact of a corporation in a village or in a district, and then, through avarice, does not hold to his compact, (the king) should banish him from the realm. (The king) should arrest such a breaker of an agreement and have him fined six *niṣkas* (each) of the value of four *suvarṇas* and one silver *śatamāna*."

should be banished from the village. There are seven more records which relate to the Vayiramēga-taṭāka, six belonging to the time of Kampavarman while the seventh is undated. The earliest of them registers a transaction relating apparently to another tank and imposes on those who violate it a fine to be credited to the funds of the Vayiramēga-taṭāka (No. 85 of 1898). The next records a gift of land to it (No. 11 of 1898) while the third mentions a gift of 1,000 *kaḻañju*[1] of gold by a chief and stipulates for the removal of silt during three months of the year commencing from Āṇi (June-July) in order to secure religious merit for the donor (No. 42 of 1898). The fourth (No. 90 of 1898) registers a gift of gold and paddy by a private individual. From the interest of both had to be met the cost of removing silt for two months commencing from Vaigāśi (May-June). The next two (Nos. 65 and 84 of 1898) refer to a gift of 200 *kaḻañju* of gold, the interest from which was 30 *kaḻañju* per year. This amount was to be spent annually in removing silt from the tank and depositing it on the bund. The village assembly expressed their gratification at this charitable act of the donor and exempted him from payment of certain taxes. The last record, which is undated, but which probably belongs also to the Gaṅga-Pallava period (No. 69 of 1898), provides for the up-keep of a "second boat" on the Vayiramēga-taṭāka, which was meant to be employed in removing silt. One hundred *kaḻañju* of gold were given and every day a certain specified extent of the tank was to be cleared and the mud deposited on the bund. The endowment was entrusted to the village assembly of Uttaramallūr.

That there was a tank with a sluice at Guḍimallam near Renigunta Junction in the North Arcot district is proved by an inscription of the Gaṅga-Pallava king Dantivikramavarman (No. 226 of 1903), which records a gift of land, the income from which was to be spent in removing silt from a second tank in the same village. Those who look after the gift are assured of acquiring the merit of performing a horse-sacrifice !! At Ukkal in the Arcot taluk of the same district was a tank for which a donation of paddy was made during the reign of Kampavarman identical with the Gaṅga-Pallava king of the same name mentioned above (*South-Ind. Inscrs.*, Vol. III, Part I, p. 9). This endowment was entrusted to the "annual supervision" committee of the village. During the same reign a tank seems to have been constructed at Śōḻapuram near Vellore in the same district. It was called Kanakavalli-ēri and a temple of Viṣṇu was also built in the village about the same time (*Ep. Ind.*, Vol. VII, p. 194). At Kāveripāk in the Walaja taluk, where Clive gained a victory over Raja Sahib and his French allies in 1752, is a large reservoir which according to the *District Manual of North Arcot* (Vol. II, p. 438) is "the most extensive in the district having a bund about 4 miles long, stretching from north to south. It has, of course, a fabulous origin assigned to it, a certain recluse being said to have formed a desire to construct a reservoir at the spot." The village is mentioned in a Bāṇa inscription found at Tiruvallam dated in A. D. 888, where it receives the other name Avaninārāyaṇa-caturvedimaṅgalam (*South-Ind. Inscrs.*, Vol. III, Part I, p. 95) called evidently after a king whose title was Avaninārāyaṇa. Thus there is no doubt that the village existed in A.D. 888. The tank which is its most prominent feature probably also existed at the time, though no

[1] One *kaḻañju* is equal to 82 grains, approximately, according to the *Madras Manual of Administration.*

evidence is at present forthcoming to prove it.[1] In a mutilated inscription at Dharmapuri in the Salem district, dated in A.D. 878-79, reference is made to the repair of a tank by a private individual during the reign of the Noḷamba-Pallava king Mahendra (No. 348 of 1901). The *District Manual of North Arcot* (Vol.II, p. 305) says of the reservoir at Māmaṇḍūr in the Arcot taluk, 5 miles south-south-west of Conjeeveram:—" The largest tank is that of Dusi-Mamandur. Though the waterspread is not so extensive as that of the Kāveripāk tank, the depth of water is much greater, and the supply lasts for fifteen months, while Kāveripāk is exhausted in nine. The bund rests upon the bases of two hills and islets rise here and there in the centre of the reservoir, making it the prettiest tank in the district." It is mentioned under the name Citramēga-taṭāka in two Cōḷa inscriptions found in the rock-cut cave close to it (Nos. 39 and 40 of 1887-88). This name, coupled with the fact that the cave contains an inscription in Pallava-Grantha characters, which is unfortunately very much damaged, leads to the presumption that both the tank and the cave must have come into existence during Pallava times. It was probably called Citramēga-taṭāka after a Pallava king who bore the title Citramegha. At Taṇḍalam, 4½ miles west by north of Arkonam Junction, is a tank for which a sluice was built by a certain Pallava-Mahārāja (*Ep. Ind.*, Vol. VII, p. 25 *f*). The inscription as well as the sluice belong apparently to the Cōḷa period. But the tank is probably older, and this is why I have referred to it here.[2]

Coming to the times of the Cōḷas we find Parāntaka I., who reigned in the first-half of the tenth century and who seems to have established the power of his family, granting a field in favour of the tank at Sholinghur, 7 miles from the Madras Railway Station of the same name in the North Arcot district. The tank was called Cōḷavāridhi (*i.e.*, the Cōḷa ocean) at the time, and the grant was made in the 9th year of Parāntaka's reign corresponding roughly to A.D. 914-15 (*Ep. Ind.*, Vol. IV, pp. 221 to 225). To the 15th year of the same king belongs the Udayendiram grant, which mentions a feeding channel of the tank at Viṇṇamaṅgalam (*South-Ind. Inscrs.*, Vol II, Part III, p. 389), a station on the Madras Railway next to Ambur on the Katpadi-Jalarpet line. Of the same reign are two more inscriptions mentioning tanks, *viz.*, one at Śōdiyambākkam in the Arcot taluk (*ibid.*, Vol. III, Part I, p. 19 *f*) and the other at Takkōlam near Arkonam Junction (No. 8 of 1897)—both in the North Arcot district.

Two inscriptions at Naṅgavaram in the Kulittalai taluk of the Trichinopoly district mention a tank. One of them (No. 342 of 1903) records a sale of land during the reign of the Cōḷa king Rājakesarivarman by the village assembly to a private person on account of the boat plying in the tank. The other (No. 343 of 1903) furnishes details as to how the income from this land was to be spent. The boat was to be

[1] An inscription of the 12th year of the reign of the Cōḷa king Parāntaka I. (= A.D. 917) at Tiruppāṟkadal, a hamlet of Kāveripāk (No. 693 of 1904) states that a donation of gold made by one of the king's officers for feeding Brāhmaṇas was utilised by the "tank supervision (committee)" to pay the wages of the workmen employed to remove silt in the "big tank of our village" (*i.e.*, Kāveripāk). The tank must have been built long before A.D. 917 and it is not improbable that it came into existence during the period of Ganga-Pallava rule.

[2] A considerable number of the tanks mentioned above belong to the North Arcot district. The Pālār, which is the most important river of the district, is dry during the greater part of the year, and the people depend more upon tanks for agricultural purposes. As remarked by Mr. Cox, in the *District Manual*, "North Arcot is one of the great tank districts of the Presidency. Many of its reservoirs might almost be styled lakes." Consequently it is not to be wondered at that in a review of the ancient irrigation tanks of the Presidency, North Arcot figures prominently. Even in the sequel this district will be found more frequently mentioned than any other.

utilized for removing silt. One hundred and forty baskets of earth had apparently to be taken out of the tank and deposited on the bund every day. Each of these baskets was big enough to hold six *marakkāl*. That is to say, about 200 cubic feet of earth had to be taken out every day. The establishment consisted of six labourers, each of whom had to get one *padakku* of paddy every day for his food and clothing, a supervisor who was given 1 *kuṟuṇi* and a half of paddy each day; for repairing the boat a carpenter and blacksmith, each of whom got annually 2 *kalam* and a half of paddy; and the fishermen (number not mentioned) who supplied wood (for repairs to the boat) and got 2 *kalam* of paddy annually. The village assembly had to get the land cultivated and to meet all these charges out of the income. If they failed to do it, the then reigning king could fine them and get it done. Altogether provision was made for an expenditure of 412 *kalam* [1] of paddy annually on the removal of silt. Incidentally we learn the rate of wages for unskilled labour at the time.[2] The supervisor, carpenter and blacksmith were evidently not full-time workmen and therefore they were paid at a lower rate than each of the six labourers. The date of the inscriptions is not known, but from the surname Aṟiñjigai-caturvedimaṅgalam given to the village, derived probably from Prince Ariñjaya, son of Parāntaka I., the donation may be placed roughly at about the middle of the 10th century A.D.

The "big tank" at Bāhūr near Pondicherry is mentioned in an inscription of Rājarāja I. (A.D. 985 to 1013), where the villagers agreed to contribute to the revenue of the tank (No. 178 of 1902). The committee for "supervision of tanks" in the village levied the contributions and agreed to arrange for the removal of silt annually. If any of the villagers refused to pay, the then reigning king could impose a fine to be credited to the tank-fund and have the work carried out. An inscription of the same king at Gaṅgaikoṇḍāṉ in the Tinnevelly district, dated in A.D. 1010-11 (No. 160 of 1895), refers to breaches in the tank at the village of Arikesarimaṅgalam which had been granted to a temple. An officer of the king is said to have repaired the tank, apparently at the expense of the temple. The village assembly of Ukkal in the North Arcot district sold some land in the 4th year of the reign of the Cōḷa king Rājendra-Cōḷa I. (=A.D. 1015) to the tank mentioned already under the Gaṅga-Pallavas. The income from this land was to be utilized for the up-keep of two boats assigned to the tank by a private person. The object for which the boats were maintained is not explained in the inscription recording the gift. Dr. Hultzsch who has published it (*South-Ind. Inscrs.*, Vol. III, Part I, p. 15) seems to think that the boats were intended for crossing the tank. Though they might have been used for this purpose

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[1] One *kalam* = 12 *marakkāl* or *kuṟuṇi*.
One *padakku* = 2 *kuṟuṇi*.
In Tanjore one *marakkāl* or *kuṟuṇi*=266 tolas of rice heaped.

[2] It may be interesting to note here the rates at which several kinds of labourers and others connected with temples were paid at Tanjore during the time of the Cōḷa king Rājarāja I. (A.D. 985 to 1013.) Fifty *kalam* of paddy was given annually to each drummer and to each barber; 75 *kalam* to each under-carpenter and to each under-accountant; 100 *kalam* to each of the following classes:—watchmen, dancing girls, washermen, tailors, braziers and superintending goldsmiths; 150 *kalam* to a master carpenter; 175 *kalam* to a lute player; 200 *kalam* to each temple accountant and to each dancing master. Brāhmaṇa servants got one *padakku* of paddy per day and 4 *kāśu* annually, while vocalists who had to sing Tamil hymns got 3 *kuṟuṇi* per day. Paddy was apparently sold at the rate of 2 *kalam* per *kāśu*, while the rate of interest was 12½ per cent. For one *kāśu* 3 sheep could be purchased, while one she-buffalo could be exchanged for three cows or six ewes; 1,200 plantains (perhaps of small size) could be had for one *kāśu*.

as well, the primary object of their maintenance was evidently the removal of silt from the tank as we have already seen in other cases.

A long list might now be given of all the tanks mentioned in later Cōḷa, Pāṇḍya and Vijayanagara inscriptions discovered so far in the Tamil country. But such a list would add very little to any interest which this paper may possess for the general reader and for this reason I refrain from giving it. It is enough to state that village tanks, sluices, and irrigation channels are frequently referred to in the description of boundaries and they appear to have been built by kings, chiefs and private persons of some position.

In the Telugu and Kanarese countries the construction of tanks was quite as common as in the Tamil country. In the first half of the sixth century A.D. the Kadamba king Kākusthavarman built a tank at Tāḷagunda in the Shimoga district of the Mysore State (*Ep. Ind.*, Vol. VIII., p. 36). The grants of land registered in the Alamaṇḍa (Vizagapatam district) plates of the Eastern Gaṅga king Anantavarman (*Ep. Ind.*, Vol. III, p. 20) and in the Achyutapuram (Ganjam district) plates of Indravarman (*ibid.*, p. 128) were made on the occasion of the consecration of two tanks. The Kākatīya minister Bēta built a tank at Anamkoṇḍa in the Nizam's Dominions at the beginning of the 12th century (No. 106 of 1902). The Pakhāl Lake situated 30 miles north of Warangal was constructed about the middle of the 13th century by a chief named Jagadāḷa-Mummaḍi, a son of Bayyana-Nāyaka, minister of the Kākatīya king Gaṇapati (*Annual Report* on Epigraphy for 1902-03, paragraph 12). The Vijayanagara prince Bhāskara *alias* Bhavadūra, son of Bukka I., built the reservoir of Porumāmiḷḷa in the Cuddapah district in A.D. 1369-70 (*ibid.*, para. 15). It was called Ananta-sāgara and took two years to build. During this period 1,000 labourers worked every day and 100 bullock carts were engaged in getting stones. The composer of the inscription, recording the construction of the tank, says "the amount of money and corn expended cannot be brought under account." A tank was built near Phirangipuram in the Guntur district by the Reḍḍi princess Sūrāmbā in A.D. 1409-10 (No. 162 of 1899).

The big tank at Tāṇagunda in the Shimoga district of the Mysore State was, according to Mr. Rice, constructed in A.D. 935[1] (*Epigraphia Carnatica*, Vol. VII, p. 17), while that at Chikballapur in the Kolar district is mentioned in a record of A.D. 977-78 (No. 126 of 1892). A tank with a sluice was built at Sindhuvaḷḷi in the Mysore district in A.D. 1106-7 during the reign of the Cōḷa king Kulottuṅga I. (No. 3 of 1895.) Several inscriptions at Bāgaḷi in the Bellary district record gifts made to the "big tank" for repairs, etc. The building of a tank by the Vijayanagara king Kṛṣṇarāya, with the aid of João de la Ponte, a Portuguese engineer, is referred to by Paes as follows :—"In order to make this tank the king broke down a hill which enclosed the ground occupied by the said tank. In the tank I saw so many people at work that there must have been fifteen or twenty thousand men looking like ants, so that you could not see the ground on which they walked, so many there were ; this tank the king portioned out amongst his captains, each of whom had the duty of

[1] It is doubtful if this tank is different from the one mentioned in the preceding paragraph built by the Kadamba king Kākusthavarman. If the two are identical, the reservoir constructed by the Kadamba king must have been repaired in A.D. 935.

seeing that the people placed under him did their work and that the tank was finished and brought to completion." (Mr. Sewell's *Forgotten Empire*, p. 244*f*.) Nuniz refers to the same tank and says:—"This king also made in his time a lake for water which lies between two very lofty serras . . . . The king commanded to throw down quantities of stone and cast down many great rocks into the valley, but everything fell to pieces, so that all the work done in the day was destroyed each night . . ." The king then consulted his Brahman priests who said that men or buffaloes should be sacrificed in order to propitiate the gods. Nuniz adds:—"So the king sent to bring hither all the men who were his prisoners and who deserved death, and ordered them to be beheaded; and with this the work advanced. He made a bank across the middle of the valley so lofty and wide that it was a cross-bow short in breadth and length, and had large openings (*i.e.*, sluices); and below it he put pipes by which the water escaped and when they wish so to do they close these. By means of this water they made many improvements in the city and many channels by which they irrigated rice-fields and gardens, and in order that they might improve their lands he gave the people the lands which are irrigated by this water free for nine years until they had made their improvements, so that the revenue already amounts to 20,000 pardaos" (*ibid.*, p. 364). Mr. Sewell thinks the tank must have been begun in A. D. 1520 and that it "is the large lake, now dry, to be seen at the north-western mouth of the valley entering into the Sandūr hills south-west of Hospett, the huge bank of which has been utilized for the conveyance of the high road from Hospet to the southern taluqs" (*ibid.*, p. 162).

Nuniz says that Kṛṣṇarāya gave the lands irrigated by the new tank free for nine years in order that the improvements might be completed. In earlier times a graduated scale of assessment seems to have been fixed in the case of lands cultivated under tanks recently built. In two cases belonging to the 13th century the maximum was to be levied in the 3rd year after reclamation (Nos. 485 and 506 of 1902). In a later case it was reached in the fourth year (*South-Ind. Inscrs.*, Vol. I, p. 92). The difference was probably due to the varying costs of reclamation.

Of the irrigation channels mentioned in inscriptions there are not many that are still in use and can be identified with certainty. The Uyyakkoṇḍāṉ channel in the Trichinopoly district is one of them. It "leaves the Kāverī at a distance of some miles above Trichinopoly and, flowing across the greater portion of that taluk and through the town itself, eventually falls into a large tank in the village of Valavandan-koṭṭai, about 10 miles to the east of Trichinopoly." Mr. Sewell, in his *Lists of Antiquities*, Vol. I. (p. 269), remarks:—"There is no doubt that the channel is a very ancient work." The name Uyyakkoṇḍār occurs already in a Tanjore inscription of the Cōḷa king Rājarāja I., and was probably a surname either of that king himself or of some ancestor of his. If, as may be reasonably supposed, the channel was called either after Rājarāja I., or after some ancestor of his, it must have been built in the 10th century A.D. On the head sluice of the channel is a broken stone belonging to the 28th year of the Cōḷa king Kulottuṅga III., corresponding to A.D. 1205-6. Though the channel is not mentioned in it, the sluice is referred to (No. 72 of 1890). The head-sluice of the Periyavāykkāl at Musiri in the Trichinopoly district was built of stone during the reign of the Cōḷa king Rājarāja III., about A.D. 1219 (No. 70 of 1890). In his

volume of Chitaldroog inscriptions (p. 24), Mr. Rice mentions an interesting record referring to an irrigation channel. It is dated in A.D. 1410 during the reign of the Vijayanagara king Devarāya I., son of Harihara II. A dam on the river Haridrā was built within the boundary of the temple land by certain Brāhmaṇas at their own expense and a channel was also led through the same land. It was stipulated that of all the lands irrigated by the said channel, as far as it might go, two-thirds should be for the god and one-third for the Brāhmaṇas at whose expense the channel was constructed. All expenses for repairs to wells or tanks made under the channel were to be borne in the same proportion; also the distribution of water. Some time after, the dam was breached and the Brāhmaṇas were in great distress. The unlimited merit of rebuilding the dam was explained to a military officer, who agreed to pay the cost of it. Accordingly, it was restored in A.D. 1424. In A.D. 1521 the Vijayanagara king Kṛsṇarāya built the great dam and channel at Korragal on the Tuṅgabhadrā river, and the Basavaṇṇa channel, both of which are still in use and of great value to the country (Mr. Kelsall's *Bellary District Manual*, p. 231).

It will not be out of place here to make a few remarks about the committee for "supervision of tanks," which each village in the Tamil country seems to have had in ancient times At Uttaramallūr in the Chingleput district, which has already been mentioned more than once, there are two inscriptions belonging to the beginning of the 10th century, which furnish full details about the constitution of village assemblies and the mode of selection of members to them. A free translation of these two records is given in my *Annual Report* on Epigraphy for 1898-99, paragraphs 58 to 73. We are there told that the village assembly consisted of several committees, of which the committee for "supervision of tanks" was one. This body consisted of six members who held office for 360 days and then retired. If any one who served on the committees was guilty of any offence, he was removed at once. The duties entrusted to each of these committees are nowhere clearly laid down. But those of the committee for the "supervision of tanks," with which alone we are at present concerned, do not require any detailed explanation. It may be presumed that all endowments made in favour of tanks were entrusted to them, and that they had to invest money endowments in the best possible way. We may suppose that they utilized them in reclaiming waste land and cultivating it, in order to pay the interest on the endowment from the produce. They had apparently to look after the cultivation of lands granted to tanks. The income from both these sources had to be applied to meet the charges for the annual or periodical removal of silt in tanks and for repairs, so far, I suppose, as funds would permit. Fines to be credited to the tank-fund were levied by them. Endowments for watersheds to supply drinking water to thirsty way-farers were apparently entrusted to them (No. 75 of 1898). Future research must decide what other duties they had to perform. The king does not appear to have had any direct control over the up-keep of tanks. He could of course enforce the obligations incurred by village assemblies as trustees of endowments made for tanks.

It has been already pointed out that the removal of silt in tanks was made from endowments given specifically for the purpose. In fact, grants of land or money made to tanks were to be utilized primarily for the removal of silt. For breaches in tank-bunds and similar accidents beyond man's control the villagers depended apparently on

private charity. For instance in A.D. 1189-90 there were heavy rains at Sōmangalam in the Chingleput district, and in consequence the tank breached in seven places on the same day. These were filled up at the expense of a chief. Next year the tank became full and there were two breaches in the bund which were repaired by the same chief. In A.D. 1191-92 the bund remained intact and, in order to improve and strengthen it, the same donor made a money endowment, from the interest of which the village assembly agreed to carry out the intentions of the donor by depositing a certain specified quantity of earth on the bund annually (No. 183 of 1901).

Another transaction which took place in a village near Tiruvaṇṇāmalai in the South Arcot district and which throws some light on the question of tank repairs, is here set forth in brief. In the 24th year of Tribhuvanacakravartin Kulottuṅga-Cōḷa (*i.e.*, apparently the Cōḷa king Kulottuṅga III.), corresponding to A.D. 1201-2, there was a famine in the village and rice was very dear. Two persons built a tank with a sluice at the village out of their private funds, cleared the forest and reclaimed some land. In return for this they got some land apparently as *in'ām* from the temple authorities of Tiruvaṇṇāmalai (No. 560 of 1902). Subsequently one of the donors died and the other became poor. The tank, which they built, breached in several places, and the land which they had reclaimed remained fallow "for a long time." The survivor declared his inability to repair the tank and appointed a third person to look after it (Nos. 493 and 552 of 1902). This person neglected her duties for several years. The heirs of one of the original donors declared they were unable to fill up the breaches in the tank or to build a sluice for it, and renounced their rights over two-thirds of the land granted to them in favour of a number of people, who had to repair the tank at their own expense (No. 493 of 1902).

From these inscriptions and the transactions recorded in them it appears that repairs to tanks were undertaken as works of merit. But, as in most cases tanks had endowments of land or money, the repairs were executed at the expense of these endowments. In the Kanarese country the term *kodage*, which, according to Mr. Rice (*Epigraphia Carnatica*, Vol. III, p. 8), has continued in use to the present time from great antiquity, denotes a grant of land rent-free for the construction or up-keep of a tank.[1] In cases where no endowments existed or where they were not properly managed, and where no private individuals were charitable enough to undertake repairs at their expense, the village assemblies could grant some land either near the tank to be repaired or from the waste land of the village, over which they seemed to have enjoyed undisputed ownership, as an inducement to undertake the work. In course of time the cultivable waste of villages must have dwindled down, and in cases where no private enterprise or charity was forthcoming to repair the tanks, it must have been undertaken at the joint expense of the villagers, as they were all to benefit by it. Thus apparently arose the custom of *kuḍimarāmat*[2] in Southern India.

V. VENKAYYA.

[1] See also *Ep. Ind.*, Vol. VIII, p. 51.

[2] According to the *Madras Manual of Administration* this term means "contribution of labour for petty repairs to irrigation works, which the ryots are bound to give by immemorial custom." There is a law now for enforcing it or collecting its value

BUDDHIST SCULPTURES FROM BENARES.

IN December 1903 twenty-one fine specimens of Buddhist sculptural art were presented to the Lucknow Provincial Museum by the Principal of Queen's College, Benares.[1] They once made part of a considerable collection, the bulk of which, at the instance of the Viceroy, Lord Curzon, had previously been sent to Sārnāth, where a suitable hall has since been built for their accommodation. It appears, however, that part of these sculptures, including several Brahmanical and a few Jaina images, do not originate from that place. Before the Lucknow Museum existed, Queen's College was the place where objects of archæological interest, found in the Gayā district and elsewhere, had been deposited, but, as no record has been kept of such acquisitions, there is little hope that we shall be able definitely to ascertain their provenance except as regards a few specimens which happen to have been described or reproduced in archæological publications.[2]

The following facts I have been able to gather. Professor Kern informed me that at the time when he was attached to the staff of the College (1863-65), there existed a collection of Buddhist images and reliefs, partly inscribed, most of which were known to originate from Sārnāth. As far back as 1793-94, when Babu Jagat Singh, the Dīwān of Rājā Chait Singh, built the Jagat Ganj at Benares with the material obtained from one of the Sārnāth *stūpas*, an inscribed pedestal came to light which can be identified with one of the stones lately sent to the Lucknow Museum. In 1815 the site was explored by Colonel C. Mackenzie, and in 1835-36 by Sir A. Cunningham. Their finds, comprising some sixty statues, were presented to the Asiatic Society of Bengal, and have since been deposited in the Calcutta Museum.[3] In 1851-2 Major Kittoe conducted excavations which were continued first by Mr. E. Thomas and afterwards by Professor Fitz Edward Hall.[4] The latter has left us a complete and

[1] Together with these sculptures two inscribed slabs were made over to the Lucknow Museum, one measuring m. 2·125 by cm. 65, containing 29 lines and dated Saṁvat 1383, Śaka 1248; the other cm. 68·5 by cm. 38, consisting of 7½ lines and undated. The latter records the foundation of a temple dedicated to Bhavānī at Benares.

[2] Since writing the above I have consulted a volume of the India Office Library containing Major Kittoe's drawings, which has enabled me to ascertain the find-place of nearly all the sculptures.

[3] *Cf.* Cunningham, *A. S. R.*, Vol. 1, p. 115 and J. Anderson, *Catalogue of the archæological collections in the Indian Museum* (Calcutta, 1883), Pt. II, pp. 1-31. The author (p. 5, footnote) remarks that General Cunningham presented Sārnāth sculptures to the Asiatic Society, Bengal, on the 2nd December 1835 and on the 5th October 1836.

[4] E. Thomas, *Note on the present state of the excavations at Sārnāth* (with 2 plates) *J. A. S. B.*, Vol. XXIII, (1854), p. 469, and *Correspondence relating to the explorations of the ruins of Sārnāth, J. A. S. B.*, Vol. XXV, (1856), p. 395.

accurate list of his finds which were made over to Queen's College. Nos. 5-7 of his list are identical with the sculptural fragments Nos. 13-15 of our collection. I do not know whether his immediate predecessors had discovered any sculptures. But Cunningham speaks of a number of "sitting statues of Buddha the Teacher" which after his explorations had been found at Sārnāth and deposited in the Benares College. About 1865 Sārnāth was again explored by Mr. C. Horne, C.S., but his finds seem all to have gone to Calcutta.[1] Finally we possess the description of a Buddha image (2′ 4″ high), discovered in December 1877 by Mr. H. Rivett-Carnac.[2] It was transported to Benares, but what afterwards became of it, I do not know.

As to the twenty-one sculptures, which form the subject of this paper, it should be noted that they are partly of buff-coloured sandstone and partly of basalt. Among the former are the inscribed pedestal of Jagat Singh and the three fragments of Professor Hall, which, as we saw, certainly originate from Sārnāth. There is thus reason to assume that the other sandstone sculptures also belong to that place, especially as all images, which on various occasions have been discovered at Sārnāth, consist of the same material.[3] This supposition is strengthened by the following circumstance. There are among the twenty sculptures three which can be assigned with certainty to places other than Sārnāth, namely, to Budh Gaya, Kurkihār and Nālandā; these three are all in basalt, a material much used in those parts. That the basalt images are so much better preserved than those of sandstone, might naturally be expected.

I have said that the sculptures are Buddhist, and with regard to nearly all of them, this can be inferred with certainty either from the subject or from the inscription or from both. Only in one case there exists some doubt. The slab representing "Śiva and the seven Mothers" (No. 7) would have to be styled Brahmanical, did we not know that its find-place is Nālandā, the famous *saṅghārāma* of Magadha. This circumstance makes its connection with Buddhism highly probable, if not certain.[4] It is well known that the Tantric Śakti worship became incorporated in the Mahāyāna system, and still takes a prominent place in Lamaistic cult.[5]

The circumstance that most of the images are inscribed adds not a little to their interest. For though the inscriptions, except in one instance, are not dated, and contain, with the same exception, only the so-called Buddhist creed or a brief dedication, the difference in character points to a considerable difference in age and enables us to date, at least approximately, nearly all of them.

Thus the earliest specimen is undoubtedly a standing Buddha (No. 1; ht. 79 cm.; Pl. LXII, fig. 1), the head of which is missing. Of the hands, which are both slightly injured, the left holds the hem of the *saṅghāti*, whereas the right is raised in the *abhaya-mudrā*. This is both in Burma and Nepal the gesture characteristic for Dīpaṅkara Buddha; but, as in the Gandhāra reliefs and also in the Kaṇheri caves this Buddha

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[1] *Catalogue*, p. 26 *sqq*.

[2] *Proc. A. S. B.* (1878), p. 68.

[3] A. Foucher, *Etude sur l'iconographie bouddhique de l' Inde* (Paris, 1900), p. 4.

[4] It should, however, be noticed that Cunningham (*A. S. R.*, Vol. I, p. 35 *sq*.) speaks of Hindu buildings and images found on the site of Nālandā.

[5] L. A. Waddel, *Lamaism* (London, 1895), p. 129; and Kern, *Manual of Indian Buddhism* (Strassburg 1896), p. 133.

is represented in the *varamudrā*, it would be preposterous to draw any hasty conclusions.[1]

The material is sandstone, a fact which would lead us to group it with the Sārnāth sculptures. We should feel the more inclined to do so, as the image in its style displays a striking similarity to a Buddha image in the Calcutta Museum (S 15),[2] which belongs to the collection acquired by Cunningham at Sārnāth Here we find not only the same attitude, but also the same archaic-looking robe, which clings without a fold tightly and smoothly to the limbs, and exhibits their outline with great distinctness The girdle (*kāyabandhana*) with which the lower garment (*antaravāsaka*), is bound to the loins, is also clearly shown. The Calcutta duplicate, as we might almost call it (though its size is considerably larger, *viz*, m 1 60), enables us to restore the missing head. The halo must have been different, probably of the rounded shape, found with another Buddha image from Sārnāth, now in the British Museum [3] This one, though different in attitude (it shows the Buddha sitting on a throne in the European fashion and in the preaching attitude), approximates to our example in the treatment of the dress, and for this reason may be assigned to the same date. It is noteworthy that all three, like the Buddhas of Gandhāra, have both shoulders covered The period to which these images belong must be that of the early Guptas ; the inscription (Pl. LXIV, No. 1) with its square Gupta character cannot be later than the 5th century of the Christian era It is deeply cut on the pedestal in one line, 23 cm. long, which may have contained 17 letters, about 1 cm. high Unfortunately the middle portion is destroyed, causing the loss of probably 5 or 6 *aksaras*, of which the first and last are still partly visible. Moreover, the surface has peeled off all along the upper part of the inscription, by which some of the vowel strokes have disappeared. The following is a reading of as much of it as remains :—

D[e]yadha[r]mmo yam vi . . . . *svāmi Skandava[r]nna[sya]*.

"This is the pious gift of . . . . Master Skandavarṇa"

Some three centuries later in date, judging from the character of its inscription, is the fine basalt statue of Avalokiteśvara, also called Lokeśvara or Lokanātha (No 2 ; ht. 50 cm.; Pl. LXII, fig 2). The number of arms also would point to a comparatively late date, though the excellent execution forbids us from attributing it to the expiring days of Indian Buddhism. Six-armed images of Lokeśvara are not very common in mediæval India.[4] We may assume that the form with two arms represents a more primitive type The well-known eleven-headed Lokeśvara of Lamaism, on the contrary, is mostly provided with six or even eight arms.[5] Up to the present day a famous six-armed image of white marble is worshipped in the upper valley of the

[1] *Cf.* Foucher, *op. cit.*, p. 79 *sqq.*, and Grunwedel-Burgess, *Buddhist art in India* (London, 1901), p. 143 (and foot-note 1). The *mudra* of the Tibetan Dipankara (Mar-me-mdzad) is again different. *Cf.* Grünwedel, *Mythologie des Buddhismus in Tibet und der Mongolei* (Leipzig, 1900), p. 110, fig. 89.

[2] Anderson, *Catalogue*, pt. II, p. 12, and Foucher, *op cit*, p. 83, fig. 8.

[3] Foucher, *op. cit.*, p. 88, fig. 10.

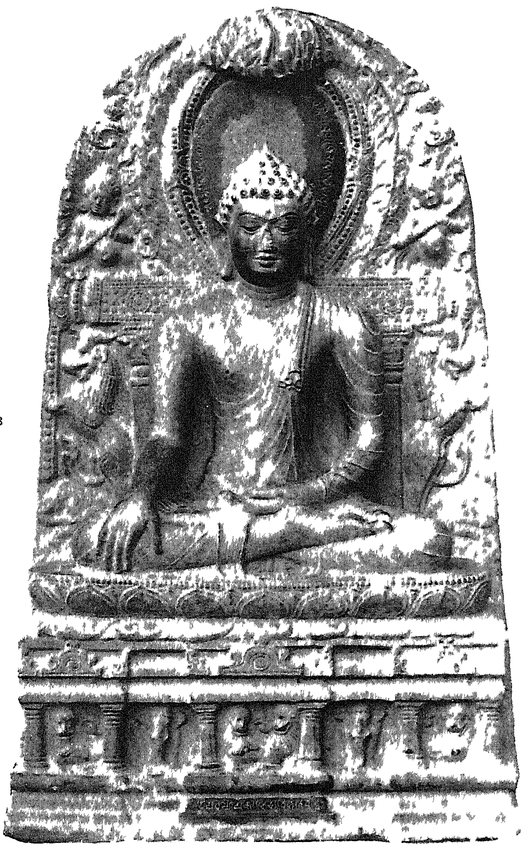
[4] A few specimens are in the Calcutta Museum. *Cf.* Anderson's *Catalogue*, Pt. II, p. 77, Kurkihār 14. Among M. Foucher's miniatures, out of forty one representations of Avalokitesvara, only two have six arms. On his different forms *cf.* Waddell, *The Indian Buddhist cult of Avalokita J. R. A. S.*, 1894, p. 51 *sqq*

[5] Waddell, *op. cit.*, pp. 15 and 357, and Grunwedel, *op cit*, p. 133 (fig. 51). See also *Cave Temples of India* by Fergusson and Burgess, p. 357, and Pl. LV, 2.

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Candrabhāga, by the Hindus as Trilokanātha, and by the Lamas as sPyan-ras-gzigs, Thugs-rje-chen-po or 'Phags-pa, all Tibetan designations of Avalokiteśvara.[1]

His original attribute is presumably the red lotus-flower (*padma*), whence his name Padmapāṇi, which, as noted by Dr. Waddell, is also an epithet of Brahmā. Bodhisattva images in various postures, holding a lotus, have been found in Gandhāra and have been, rightly or not, identified with Avalokiteśvara.[2] It may be surmised that originally they were simply attendants of the Buddha, either *devas* or human worshippers, who carried a lotus as an offering. So much is certain that the Padmapāṇi figures of Gandhāra were the prototype of the mediæval Lokeśvara images. Here the lotus-stalk is invariably held in the left hand, whereas the right is stretched out in the gift-bestowing gesture (*varamudrā*). In our specimen we notice the effigy of a wheel in the palm and a web between the thumb and the fore-finger of this hand.

The two additional hands of the four-armed type hold a rosary (*akṣasūtra*) and a water vessel (*kamaṇḍalu*) or a book (*pustaka*), which, as Dr. Waddell has remarked, are the attributes of Brahmā. In the six-armed figures, like the present, we find, besides the attributes enumerated, a snare (*pāśa*) in the left hand, whilst that in the third right hand has the appearance of a jewel. The snare which in Hindu mythology is the fearful weapon of the Vedic Varuṇa and of Yama, the god of death, hardly suits the character of Avalokiteśvara, "the great Compassionate." May we assume that the stalk of the lotus-flower, his original attribute which we find often wound round his arm in ornamental scrolls, was mistaken for a snare and prompted the Indian sculptors to add a third pair of arms? Any one who has had occasion to notice the common misconceptions to which in India plastic representations of the deities give rise, will admit that the explanation is at least plausible. However this may be, it is certain that the snare has finally become one of the chief attributes of Avalokiteśvara, who, on that account, received the epithet of Amoghapāśa ("He of the infallible snare").[3]

Apart from the lotus-flower and the *vara-mudrā*, Lokeśvara can be recognized by the figure of his spiritual father, the Dhyāni-buddha Amitābha, which is either inserted in his head-dress or placed on or over his head, as is the case with a two-armed image of the Calcutta Museum,[4] and also with the Trilokanātha of Lahul.

On both sides of the main figure we notice a female figure kneeling with folded hands in adoration. Their attitude and purely human shape would admit of their being mortal devotees, but more likely they represent the goddesses Tārā and Mārīcī or Bhṛkuṭī, which often attend Avalokiteśvara.[5] Their position on the same level with the central figure favours the latter explanation. Behind the figure to the proper right we notice, moreover, a lotus flower which is, no doubt, the blue variety (*utpala*), the typical attribute of Tārā.

The lower end of the sculpture is defaced. The inscription on both sides of the mitre contains the Buddhist creed. The character agrees most with the nail-head type of the eighth century.

To a somewhat later period belongs the highly ornamental statue of Śākyamuni[6] (No. 3; ht. 76 cm.; Pl. LXII, fig. 3), from Kurkihār in Bihār. The Buddha is seated

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1 *Cf.* my note on *Triloknāth*, *J. A. S. B.*, Vol. LXX (1902), p. 1.

2 Grünwedel-Burgess, *op. cit.*, p. 192 *sqq.*, and figs. 139-147.

3 Grünwedel *op. cit.*, pp. 129 *sqq.* (figs. 105 and 106) and 132.

4 Foucher, *op. cit.*, p. 101, fig. 12.

5 Foucher, *op. cit.*, p. 99.

6 Kittoe, *Drawings*, Vol. I, No. 157.

in the earth-touching attitude (*bhūmisparśa-mudrā*), the traditional pose of the *bodhi* known as the adamantine pose (*vajrāsana*). This is, moreover, borne out not only by a border of *aśvattha* leaves round the oval-shaped halo, surmounted by a canopy of similar foliage over the Buddha's head, a clear indication of the Bodhi tree, but also by a small *vajra*, laid in front of him on the lotus-seat under his crossed ankles. It is curious that a *rdor-je* in exactly the same position is found in Lamaistic Buddha images which are said to represent Sa-kya thub-pa. I noticed it on a brass statuette (ht. 15 cm.) in possession of the Rānā of Triloknāth (Lahul). To return to our sculpture, the image proper calls for little notice. The uncovered right shoulder, the mark on the forehead (*ūrṇā*), the hair arranged in schematic curls and the protuberance of the skull (*uṣṇīṣa*), which here assumes the pointed shape characteristic of the later period, are all in agreement with the canon. Except for the nose, the statue is in perfect preservation.

The plainness of the Buddha's figure is emphasized by the elaborateness of his throne. We see "the great Monk," as it were, deified. Royal elephants support the *siṁhāsana*, symbolized by a double pair of recumbent lions. On it the lotus-cushion is placed, a development of the expanded lotus-flower on which we find the Buddha in Gandhāra, and which is the favourite seat of the gods.[1] A pair of fabulous beings, half-man and half-bird (*kiṁnaras*), whose dwarf-like figures are surrounded by the scrolls of their bushy wings and tail, are standing with musical instruments [2] in their hands on the ornamental rail resting on two pilasters which form the back of the throne. The knobbed ends are supported by horned lions, prancing over small elephants. This decorative device is of great interest, as we can trace its development all through Buddhist art. On a medallion of the Amarāvatī *stūpa* rail we find winged animals (lions or horses), supporting the projecting *makara* heads of a throne.[3] The meaning of such a decorative bracket will need no explanation. But if, as in the present case, the throne is carved on a slab, there remains in front of the standing lion an open space which the Indian sculptor, as fond of *alaṁkāra* as the Indian poet, fills with the figure of an elephant. In the present instance the lion stands behind the elephant, but in the next stage it is raised on its back. This we find on a fragment from Nālandā [4] and also on the Buddha image, known as Māthā Kunwar near Kasia.[5] In both instances the lion is provided with reins, which are held by a miniature figure sitting on its back. Another similar figure stands on the head of the elephant. A still wilder development of this in its origin perfectly intelligible decorative element is found in Dravidian and Tibetan art. In a Tibetan painting on silk of the 18th century [6] the lion which stands on the elephant is again surmounted by a goat on which a human figure is seated, which finally serves the original purpose of supporting the bar of the throne.

Our Buddha image, which thus forms the connecting link between the earlier and later examples, must belong to the 9th century. This appears from the character of the two inscriptions. The one running along the border of the halo contains only the

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[1] In Brahmanical art more particularly of Brahmā, "the lotus seated" (*padmāsana*) and of Lakṣmī.

[2] *Cf.* the *kiṁnara* of the Ajaṇṭā caves. Grünwedel-Burgess, *op. cit.*, p. 46, fig. 21.

[3] Grünwedel-Burgess, *op. cit.*, p. 29, fig. 8.

[4] Grünwedel-Burgess, *op. cit.*, p. 53, fig. 31.

[5] Cunningham, *A. S. R.*, Vol. I, p. 78 *sq.*

[6] Grünwedel-Burgess, *op. cit.*, p. 56, fig. 32.

Buddhist creed. The other, 11 cm. long, on the lower rim of the pedestal, records the name of the donor, *Deyadharmmo yaṁ Kāśi-stha-Vinītabuddhiḥ* (read *-ddheḥ*). "This [is] the pious gift of Vinītabuddhi of Kāśi." The circumstance of the donor being an inhabitant of Benares does not, of course, prove that the sculpture belongs to that place. It would rather indicate that the donation happened somewhere else. The material would lead to the same conclusion.

A striking contrast with the divine repose expressed in the three first-described images is presented by the figure of the Tantric goddess Mārīcī (No. 4; ht. 72 cm.; Pl. LXII, fig. 4). She is standing in the *ālīḍha* position, *i.e.*, like an archer with the right leg bent and the left outstretched, the typical attitude of the Tantric deities in their angry form. The garment on the left shoulder and breast is but slightly indicated; the lower part of her body is clad with a petticoat, held round the loins by a girdle. She is eight-armed and three-faced, each face being marked with a frontal eye. The left face is that of a boar, which together with the *vajra* in her upper right hand accounts for her other name, Vajravarāhī, "the she-boar of the thunderbolt." The second right hand is missing. The third holds what appears to be an arrow, the shaft of which remains; and the fourth, resting against the thigh, an object which perhaps is meant for a sling-stone. The attributes to the proper left are a bow, an aśoka (?) flower and a snare, whereas the fourth hand, which is slightly injured, must have been in the *tarjanī-mudrā*, *i.e.*, the fore-finger (Skr. *tarjanī*, *lit.* "the threatening one") is raised menacingly. This we may infer from a comparison with a Mārīcī image in the Calcutta Museum,[1] which shows so close an affinity with our specimen, that we are justified in restoring the one by the aid of the other. Thus it seems highly probable that the broken second hand held a sword, as does the upper right hand of the Calcutta image, which holds the *vajra* in the second hand. It is curious that the miniature figure of the Dhyāni-buddha, which in the Lucknow image will be seen in the diadem, is placed over it in the Calcutta sculpture. It is difficult to decide which of the two is the more original, but we have noticed the same distinction between the above discussed image of Avalokiteśvara and a representation of the same deity in the Calcutta Museum.[2]

In order to complete the description of our Mārīcī image, we must note four miniature female figures in the four corners of the slab. Though provided with only two arms and one boar's-head, they are apparently mere repetitions of the main figure, a well-known device in Buddhist art. Another example is afforded by the Javanese Mañjuśrī of the Berlin Museum.[3] That the Mārīcī of Calcutta is only thrice repeated is evidently due to the position of the upper right arm, which swings the sword and leaves no space for a fourth figure. The female statuette seated cross-legged between Mārīcī's feet as well as the seven boars on the pedestal, are common to both the Calcutta and the Lucknow image. But in the former the central boar is shown facing, and seems to rest on the Asura head, which in the Lucknow specimen is placed immediately below the cross-legged figure and over the boar. Both images are from

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1 Anderson, *Catalogue*. Foucher, *op. cit.*, p. 149, fig. 27.

2 On the occurrence of such surmounting Buddha figs. in Tantric sculpture, *cf.* Waddell, *op. cit.*, p. 338, and Foucher, *op. cit.*, p. 98 (footnote). I noticed one on the diadem of a Tārā image at Sārnāth.

3 Grünwedel-Burgess, *op. cit.*, p. 200, fig. 146.

Magadha, which may partly account for their great similarity Of the one under discussion we can define the find-place more exactly. It was found in 1862 by Sir A. Cunningham in the ruins of Kurkihār, the ancient Kukkutapada-vihāra, east of Gayā.[1] But not only in Magadha was the worship of Mārīcī once prevalent: a pedestal with the seven boars and inscribed with the Buddhist creed has been found as far west as the Kāngrā valley (Pañjāb), the ancient Trigarta[2] Up to the present Mārīcī is worshipped in Nepal as Vasudhārā and in Tibet under the name of rDorje Phagmo, a literal translation of Vajravarāhī.[3]

In order to understand the plastic representations of Mārīcī, it should be remembered that she is a goddess of dawn, a personification of the rising sun As such she is daily invoked by the lamas when the sun's disc is first seen in the morning For that reason she is regarded as an emanation of Amitābha, the Buddha of boundless light, whose effigy she wears in her mitre[4] This head-dress, itself essentially un-Indian, though worn by Indian deities like Visnu, goes possibly back to an Iranian origin As to Mārīcī's three faces,[5] M. Foucher has pointed out the curious connection with certain Visṇu images met with in Kashmir, which likewise are three-faced, that to the left being a boar's head. I may add that similar images are found in other parts of the Western Himālayas also, *e g*, in Kullū. Sometimes the other side-face is that of a lion The two animal heads are commonly explained as referring to the Boar and Man-lion *avatāras*. It may, however, be surmised that originally the three faces of those sun deities were intended to signify the three phases of the sun at dawn, at noon, and at dusk

Whereas Mārīcī thus exhibits a close relationship with Visnu, who from a Vedic sun-god became the supreme deity of one of the great sects of India, her image shows in one respect a remarkable affinity with representations of Sūrya The seven boars on the pedestal correspond exactly with the seven horses, the seven days of the week, which characterize the Indian Hēlios. Evidently they are also meant to draw the chariot on which the goddess is supposed to stand, and which in some cases is indicated by a wheel at each side of the pedestal. The cross-legged figure between Mārīcī's feet, whatever its name may be, clearly takes the place of Aruṇa, the charioteer of the sun-god, and may be thought to fill the same office with Mārīcī Finally the Asura-head—M Foucher calls it more definitely a head of Rāhu, the eclipse demon—what else can it be but a trophy, which the demon-slaying goddess has bound in front of her chariot?

To the same Tantric cult belongs the worship of the Śaktis, female energies or counterparts of the male deities of Hinduism. The sculpture (No 5, ht 25·5 cm, Pl. LXIII, fig. 1) which refers to this cult and originates, as we saw above, from the famous Buddhist site of Nālandā, might at first sight be taken for a representation of the eight Energies or Mothers (*Aṣṭamātaras*); but on close inspection it will be seen that the first figure from the proper right is a male deity, and, as appears from his vehicle the bull, and from his attributes, the trident and the cup (the two other hands hold a *vīnā*), must represent Śiva. Of the remaining female figures, each is provided with the

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1 Cunningham, *Mahabodhi*, pp. 55 and 74, Pl. XXX. *Cf. A. S R.*, Vol. I, p. 4 *sqq*.

2 *Cf.* Cunningham, *A. S. R.*, Vol. V, p. 178, Pl. XLII.

3 *Cf.* Waddell, *op. cit.*, pp. 28 and 361, and Grunwedel, *op. cit.*, pp. 145 and 157.

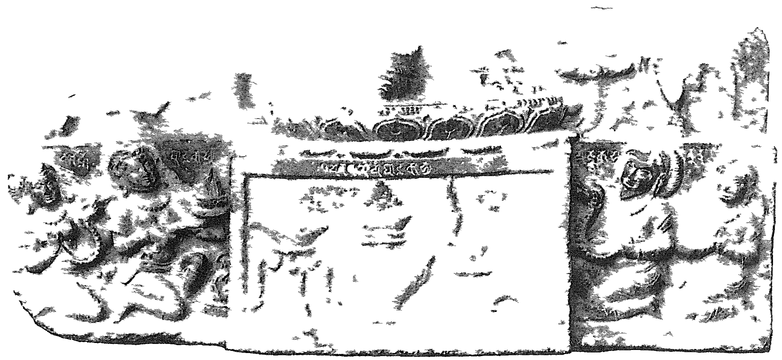
4 In some instances, however, the Buddha-figure in the head-dress seems to be the Dhyāni-buddha, Vairocana.

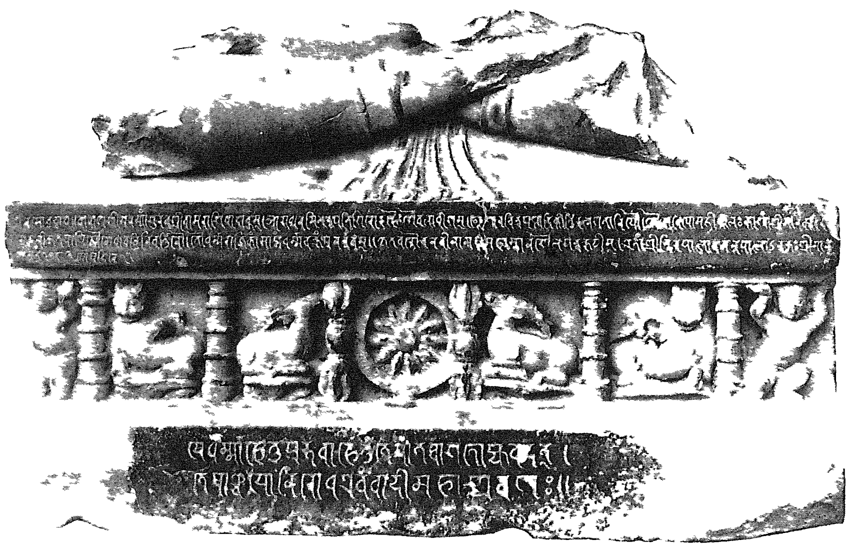
5 See also *Annual Progress Report of Archæological Survey of Western India*, 1903-4, para. 20.

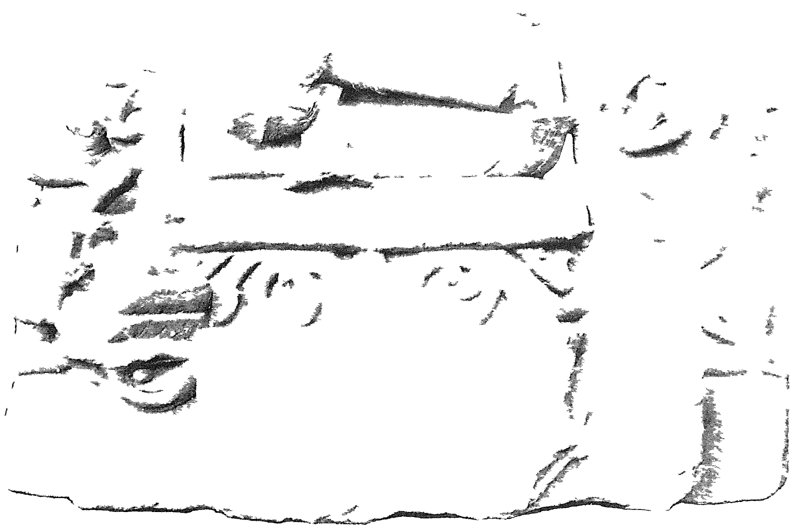
PLATE LXIII

BUDDHIST SCULPTURES FROM BENARES.


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attributes and vehicles[1] of its male counterpart. Next to Śiva comes Brahmāṇī, like Brahmā, the Creator of the four Vedas, four-faced (the face at the back being invisible), carrying a rosary (*akṣamālā*) and a water vessel (*kamaṇḍalu*) and seated on a goose (*haṁsa*). The third is Māheśvarī, the Śakti of Maheśvara or Śiva and, therefore, provided with a trident as attribute and with the bull Nandi as *vāhana*. Kaumārī, the female counterpart of Kumāra, holds like that god a lance[2] which, though broken, is still recognizable, and is seated on a peacock. Vaisṇavī seated on Garuḍa, the mythic bird of Viṣṇu, wears a mitre and is four-armed. The attributes of Viṣṇu, the lotus (*padma*), the mace (*gadā*), the conch (*śankha*) and the wheel (*cakra*), are partly broken, but can be restored with certainty. It will be noticed that the position of the legs differs from that of the other Śaktis; the attitude is one characteristic of Sūrya, the Sun-god. Next comes Indrāṇī or Aindrī on Indra's elephant Airāvata. The right hand, which is broken, must have held the thunderbolt (*vajra*), the ancient attribute of the Indian Zeus. The boar-headed figure on the bull is Varāhī, the Śakti of Varāha, the boar *avatāra* of Visṇu. Her attributes are not clear. That in the right hand seems to be a curved knife or dagger, that in the left a cup from which she is drinking. Her *vāhana* is a bull. The last figure is not the Śakti of any male deity. It is the terrible goddess Cāmuṇḍā also known as Caṇḍikā, "the fierce one," or Aparājitā, "the unconquered one," represented as an ugly old woman seated on a corpse. She wears a garland of human heads, and a scull-trident (*khaṭvāṅga*) rests against her left shoulder. In her right hand she holds a cup, the contents of which, probably blood, she seems in the act of tasting. Her second right hand holds a curved dagger, the second left what may be a human bone. The eighth Śakti which is omitted on our sculpture is Nārasiṁhī, the energy of Narasiṁha, the man-lion *avatāra* of Viṣṇu.[3]



Fig 1.

The inscription (Pl. LXIV, No. 2) cut along the raised rim of the sculpture consists of one line, 2 cm. long, of ornamental characters of the eighth or ninth century,[4] which I read:—

Om Śrī-Nalanda Śrī-Dhamrabhaṭṭe de[ya] dha[r]mo apratipalīta Śauvīrīkasya Dakṣi(?)kasya* "Om. The pious gift to the illustrious Dharmabhaṭṭa at the glorious Nālandā by the *apratipalīta* (?) Dakṣika of Sauvīra."

Another deity which, though not belonging to Buddhism proper, was widely worshipped by Buddhists from Gandhāra to Java,[5] is Jambhala or Vaiśravaṇa, the god of wealth. His image (No. 6, ht. 32·5, cm.; fig. 1) shows him

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[1] *Aindrī gajasamārūdhā Vaisṇavī garudāsanā Māhesvarī vrsārūdhā Kaumārī śikhivāhanā Brāhmī haṁsasamārūdhā* (*Devīkavaca*).

[2] *Cf. Mṛcch.* (*ed.* Stenzler), p. 30, l. 20: *namo varadāya kumāra-Kārttikeyāya namah kanakaśaktaye.*

[3] On the eighth Śakti, *cf.* Moor, *Hindu Pantheon* (Madras, 1864), p. 65, and Burgess, *Elura Cave Temples*, Pl. XXXIV, figs. 1 and 3.

[4] A facsimile, Cunningham, *A. S. R.*, Vol. 1, Pl. XIII, 2. The character is the same as that of the other Nālandā inscription, which contains the name of Rāja Gopāla of Gauḍa.

[5] *Cf.* my *Note sur une statue du Gandhāra conservée au Musée de Lahore*, B. E. F. E O. (Avril-Juin, 1903.)

as the embodiment of worldly prosperity. With his left hand he clasps the neck of the pearl-vomiting mongoose, his typical attribute. As pointed out by M. Foucher,[1] its prototype is the purse, made of the skin of the mongoose (Skr. *nakula*) and therefore called *nakulaka*. Thus Jambhala's *nakula* is in reality the *nakulaka* redivivus. The attribute in his right hand, in the present instance mutilated and unrecognisable, is a lemon. The three objects in front of his lotus-seat seem to be sacrificial implements. The central one is a conch-shell ; the nature of the other two is not clear. But it is noteworthy that on both sides of the head of one of the Jambhala images in the Calcutta Museum, reproduced by M. Foucher, we find a vessel similar to that on which in our sculpture his right foot is placed Except for the head, which in our specimen is wanting, we cannot fail to notice the striking resemblance between the Buddhist Jambhala and the Brahmanical Gaṇeśa [2] The latter also "the remover of obstacles" is essentially a god of prosperity and, on that account, is invoked at the outset of undertakings and portrayed over the entrance of buildings. The common assumption that Gaṇeśa should be a god of wisdom seems to me to be unsupported either by literary or iconographical evidence It would be interesting to trace the relationship between those two popular deities and the history of their plastic representations.

Among the sculptures from Queen's College there are two fine specimens of miniature votive *caityas* of basalt, such as are commonly met with in important Buddhist sanctuaries like Budh Gaya The smaller of the two [3] (No. 7, ht. 27 cm.; fig. 2) from Bihār is of special interest. On each of the four sides there is an ornamental chapel, in which a cross-legged figure is seated These four figures, each characterized by a special gesture (*mudrā*) and, like the Tīrthaṁkaras of the Jainas, by an emblem (*cihna, lakṣana*) in front of their seat, must be the Jinas or Dhyāni-buddhas of the four quarters. Their names are: Akṣobhya seated to the east in the earth-touching attitude (*bhūmisparśa-mudrā*) on a throne whereon are carved a pair of lions ; Ratnasaṁbhava facing southward and distinguished by the gift-bestowing gesture (*vara-mudrā*) and two horses (?) ; Amitābha, sitting towards the west in meditation (*dhyāna-mudrā*) on a peacock throne ; and Amoghasiddhi, facing north with his hand raised as if to impart security (*abhaya-mudrā*), and having a pair of winged dragons on his seat.[4] It will be noticed that these Dhyāni-buddhas do not wear the monk's dress of the Mānuṣi-buddhas, but are adorned with a diadem and various ornaments. Beneath the figure of Ratnasambhava there are traces of an inscription, which seems to contain merely the name of the deity : *[Ra]t[na]sa[ṁ]bhavaḥ*.

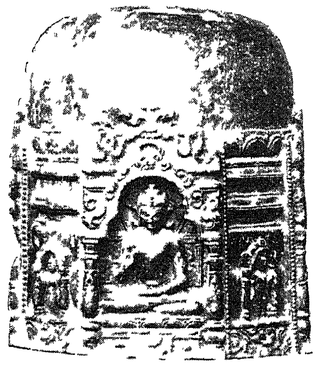


Fig. 2.

In the intervening spaces between the four chapels there are smaller niches, each

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[1] *Cf.* Foucher, *op. cit.*, p. 125.

[2] It is true that Ganeśa is mostly four-armed, but some ancient images, like that of Bhitari noticed by Cunningham (*A. S. R.*, Vol. I, p. 99), have only two arms.

[3] Kittoe, *Drawings*, Vol. I, No. 100.

[4] *Cf.* Waddell, *op. cit.*, p. 350. In Dr. Waddell's list Aksobhya has the elephant, whereas the lion belongs to Vakocana, the Dhyāni-buddha of the centre. The *cihna* of Amoghasiddhi is described there as a winged dwarf (Kimnara).

containing a standing female figure. These figures which must represent the female energies of the four Dhyāni-buddhas are marked by inscriptions over them, from the character of which we may refer the sculpture to the ninth or tenth century. That to the right of Akṣobhya, holding a *vīnā* (?) and having a lotus-(?) stalk wound round its left arm, is called Mahāsāhasapravada That to the right of Ratnasambhava has also a lotus-stalk to the left and holds a *vajra* (?) in the right. Her name is Mahāvatīrā The one to the right of Amitābha holds—so it seems—a bunch of flowers in the left hand, to which her name Mahāmāñjarī seems to refer. Her other hand is in the *vara-mudrā* The fourth figure has a lotus-flower in the right hand and is marked as Sitavati This may be the same as the Sita of Dr. Waddell's list, who, however, is said to be the Śakti of Amitābha. The other names all differ.

The other votive *caitya* (No. 8 ; ht 39 cm.) has also four chapels with cross-legged Buddha figures, respectively in the *uttarabodhi*-(?), *bhūmisparśa*, *dharmacakra* and *vara-mudrā* The minor niches are occupied by standing figures, which also appear to be Buddhas One of them holds both hands before the breast. The other three have the right hand in the gift-bestowing attitude, whereas in the left they hold some indefinite object.

That the basalt pedestal (No. 9, ht. 21 cm. ; Pl. LXIII, fig. 2) originates from Magadha, may be inferred from its being reproduced in Cunningham's Mahabodhi,[1] though no reference to it is made in the text. Of the image to which it belongs only so much remains as to indicate that the deity stood on a lotus cushion and had an attendant standing on each side. Possibly it was a Bodhisattva The stalk which we see rising to the left of the main figure could indicate Avalokiteśvara, Mañjuśrī or Maitreya, according as it belonged to a red lotus, a blue lotus or a *campā* flower.

On a countersunk panel beneath the lotus on which the central figure stood, there are three objects in low relief : a conch-shell, a vessel on which a dish of flour (?) is placed, and a burning lamp. Evidently these represent sacrificial implements such as are found commonly on the base of statues at Budh Gaya. On both sides of the central panel we find a couple of human worshippers. The male figure to the proper right has in his right hand a lotus-shaped censer ; with his left he seems to place a piece of cloth in an alms-bowl which stands in front of him. The woman kneeling behind him presents a pearl-string, as does the male person on the opposite side of the sculpture. The fourth figure folds the hands in adoration. That these four persons are the actual donors of the image is borne out by the inscriptions (Pl. LXIV, No 3). Along the rim over the central panel we find : *Om deyadharmo yaṁThādukasya* meaning "the pious gift of Thādu(ka)." The four remaining inscriptions are placed each over one of the kneeling figures. They tell us that the man with the censer is Thādu himself. The woman behind him, probably his consort, is called Vallahū. The man on the opposite side bears the name of Yajju-(ka) and may be Thādu's younger brother or son. As far as the sculpture allows us to judge, they seem to be men of the same age. The fourth figure named Nunne may be Yajju's wife. The character is that of the ninth and tenth centuries.

Of no less interest, though inferior in workmanship, is the sandstone pedestal (No. 10, ht. 46 cm.; Pl. LXIII, fig. 3), which must have belonged to an image of

[1] Cunningham, *Mahabodhi*, Pl. XXVIII.

Sākyamuni, seated cross-legged in the attitude of preaching the law (*dharmacakra-mudrā*). We may even say more precisely that it represented the Buddha delivering his first sermon in the Deerpark (*mṛgadāva*) near Benares. This is evident from the wheel and the two deer separated by a pair of upright *vajras*, which occupy the centre of the pedestal. The two lions merely characterize it as a *siṁhāsana* (throne, *lit.* lion-seat), whereas the two supporting Cupids on the corners are a decorative element, borrowed from classical art.

We know that the sculpture originates from Sārnāth, the spot where the event to which it refers—one of the four most important in Gautama's life—was supposed to have taken place. The circumstances of the find are twice recorded by Sir A. Cunningham,[1] but unfortunately his two accounts do not agree with regard to the exact find-spot. Whereas he first states that it was unearthed by Babu Jagat Singh, the Dīwān of Rājā Chait Singh of Benares, in 1793-94, while demolishing a *stūpa* 520 feet to the westward of the great tope of Sārnāth, he mentions elsewhere that it was found at the large brick mound called Caukaṇḍī half a mile to the south of that monument. I presume that the latter statement, which was published several years after the other, is due to an over-sight.

That the sculpture belongs to Sārnāth is also evident from the inscription (Pl. LXIV, No. 4), cut in two lines, 70 cm. long, and a third line 11 cm. long on the raised border over the front relief. The letters, which at places are slightly damaged, are about 1 cm. high. The inscription was first published by Wilford, again by Cunningham [2] and finally by Dr. E. Hultsch.[3]

TRANSCRIPT.

1\. *Oṁ namo Buddhāya* || *Vārāṇaśī(sī)-sarasyāṁ Gurava-Śrī-Vāmarāśi-pādābjam* | *ārādhya namita-bhūpati-śiroruhaiḥ śaival-ādhīśam*|| *Iśāna-Citraghanṭ-ādi-kīrtti-ratna-śatāni yau* | *Gauḍ-ādhipo Mahīpālaḥ Kāśyāṁ śrīmān=akāra*[*yat*||].

2\. *Saphalī-kṛta-pāṇḍityau bodhāv=avīnivarttinau* | *tau Dharmmarājikām sāngaṁ Dharmmacakraṁ punar=navaṁ*|| *Kṛtavantau ca navīnām=aṣṭamahā-sthāna-śaila-gandhakuṭīm* | *etāṁ Śrī-Sthirapālo Vasantapālo 'nujaḥ śrīmān* [||*].

3\. *Saṁvat 1083 Pauṣa-dine 11* [||*].

4-5\. *Yedharmmā*, etc.

TRANSLATION.

Oṁ. Adoration to the Buddha! The illustrious Sthirapāla [and his] younger brother, the illustrious Vasantapāla, whom the lord of Gauḍa, the illustrious Mahīpāla, caused to establish in Kāśī [the temples of] Īśāna (Śiva) and Citraghaṇṭā (Durgā), and other precious monuments of his glory[4] in hundreds—after he had worshipped the foot of Gurava Śrī Vāmarāśi, which is like a lotus in the lake of Vārāṇasī surrounded, as it were, by Śaivala plants through the hair of bowing kings; they who have made learning fruitful, and who do not turn back [on their way] to supreme knowledge,

[1] Cunningham, *A. S. R.*, Vol. I, p. 113, and *Mahabodhi*, p. 65. Kittoe, *Drawings*, vol. I, No. 120, notes that he recovered it in 1849.

[2] Cunningham, *A. S. R.*, Vol. III, p. 114 *sqq.*, and Vol. XI, p. 182.

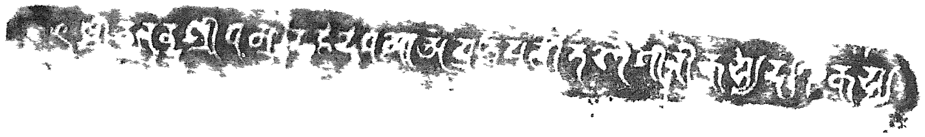
[3] E. Hultsch. *The Sārnāth inscription of Mahīpāla. Ind. Ant.*, Vol. XIV (1885), p. 139 *sq.*

[4] For this meaning of Skr. *kīrti*, *cf.* J. F. Fleet, *Corpus Inscr. Ind.*, Vol. III, p. 212, footnote.

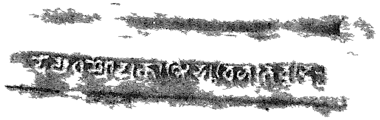
BUDDHIST SCULPTURES FROM BENARES.



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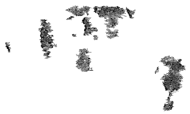
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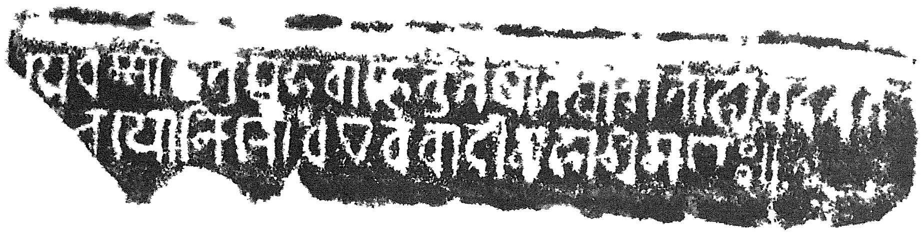
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restored Aśoka's *stūpa* and [the shrine of] the wheel of the Law completely, and built this new temple of stone from the eight holy places. Anno 1083 on the 11th day of Pauṣa. (Follows Buddhist Creed.)

My version differs from that of Dr. Hultsch in the following points. The compound *Īśānacitraghantā*, which Dr. Hultsch renders by "Īśānas (*i.e.*, *Lingas*) paintings and bells," I believe to refer to two distinct sanctuaries which once must have existed at Benares. P. Hīrānanda has drawn my attention to the following line of the Kāśikhaṇḍa (XXXIII, 75): "*Iyaṁ hi Citraghaṇṭeśī Ghaṇṭākarṇas tvayaṁ hradaḥ.*" "This is the [shrine of] Citraghaṇṭeśī and this is the tank Ghaṇṭākarṇa." The "Lady of the brilliant bell" must be Durgā, among whose attributes the bell takes a prominent place. An inhabitant of Benares informs me that the temple of Citraghaṇṭā still exists near the Cauk.

The word *dharmarājikā* denotes a *stūpa* as pointed out by Dr. Hultsch, but more particularly a *stūpa* erected by Aśoka, the Dharmarāja of the Buddhists. This is evident from the following passage in the Divyāvadāna (ed. Cowell & Neil, p. 379) quoted by M. Foucher:[1] *Aśoko nāma . . . . dharmarājo . . . . caturaśītiṁ Dharmarājikā-sahasram pratisthāpayisyati.* "Aśoka the *dharmarāja* will establish eighty-four thousand Dharmarājikās." Hiuen Tsiang[2] ascribes two *stūpas* near Benares to Aśoka. One of the two indicated the spot where the Tathāgata began to turn the wheel of the law. Presumably it may be identified with the great *stūpa* of Sārnāth, known by the name of Dhamek, which, I believe, can be derived from the ancient designation Dharmarājikā.[3] Close to this monument stood, in the days of Hiuen Tsiang, a temple which enshrined a life-size image of Buddha represented as turning the wheel of the law. The close connection of the two buildings makes it probable that this was the second ancient monument repaired by Sthirapāla and Vasantapāla, which is indicated by the name of Dharmacakra "the wheel of the law."

The edifice, the erection of which is recorded in the inscription, is called a Gandhakutī (*lit.* hall of perfumes) which originally meant the dwelling of the living Buddha, especially that in the famous Jetavana of Śrāvasti, but in later days a shrine in which his image was placed.[4] The temple of the two Pāla brothers is stated to have been of stone from eight sacred places (*mahāsthāna*). I presume that the eight sacred places of Buddhism are meant, *i.e.*, the places where the eight main events of Buddha's life happened, to wit Kapilavastu, Budh Gaya, Benares, Kuśinagara, the scenes of his birth, enlightenment, first sermon and death, and Sankāśya, Śrāvasti, Vaiśālī and Rājagrha, which witnessed the four great miracles.[5] Another possible explanation is that the eight *mahāsthānas* are the places where Buddha's relics were deposited, namely, Rājagrha, Vaiśālī, Kapilavastu, Allakappa, Rāmagrāma, Veṭhadīpa, Pāvā and Kuśinagara.[6]

Another pedestal[7] (No. 11, ht. 38 cm.; Pl. LXIII, fig. 4) originates from Sārnāth;

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1 A. Foucher, *op. cit.*, p. 55.

2 *Si-yu-ki* (transl. Beal), Vol. II, p. 46.

3 The intermediate forms would be *dhammaraika, dhamreka, dhamreka, dhammek.*

4 *Cf.* Cunningham, *A. S. R.*, Vol. XI, p. 85; Kern, *Manual of Buddhism*, p. 28; Grünwedoi-Burgess, *Buddhist art in India*, p. 46; and *Ind. Ant.*, Vol. IX, p. 143.

5 Foucher, *op. cit.*, pp. 162 and 166.

6 Kern, *Manual of Indian Buddhism*, p. 46.

7 Kittoe, *Drawings*, Vol. I., No. 144.

its material is Chunār sandstone. The main figure which, as in the last two specimens, is broken, must have been a Bodhisattva. This we may conclude from the ornaments and from the peculiar position of the legs (*lalitāsana* or *rājalīlāsana*), in which the right foot is hanging down or, as in the present case, supported by a small lotus flower placed at the side of the lotus on which the figure is seated. This is shown more clearly in the two attending figures, which are better preserved than the central one. They represent female deities and, from the lotus- (?) stalk which they hold in their left hand, it may be surmised that they may be representations of the goddess Tārā. If so, the central figure was probably Lokeśvara, of whom Tārā is the favourite attendant. It is also possible that the image represented Tārā herself, and that the two at the side were merely repetitions, as in the case of the Mārīcī image (No. 4). The lotus-stalk which we see rising to the left of the central figure would admit of either of these two identifications. Each of the two supposed Tārā figurines has again its attendant standing at its side. The two kneeling figures, male and female, can from the analogy of the Magadha pedestal (No. 9) be identified as the donors of the sculpture.

The inscription (Pl. LXIV, No. 5) on the central facet of the pedestal consists of two lines of 24 cm. and a third short line of 2 cm. in length. The average size of the letters, which are very badly engraved and at places destroyed, is 1 to 1·2 cm. I read it :

1. *Ye dha[r]mmā hetuprabhavā hetun = teṣām Tathāgato hy = avadat = tesām ca yo nirodha evaṁvādī mah[ā].*

2. *śramaṇaḥ* || *Deyadha[r]mmo yam pravara-mahāyān-ānuyāyī-[pa]ramo-pāsaka-Māgadhīya*[1] *Śrī-Śāma-*

3. *nkasya* (?)

The first line and the initial word of the second line contain the Buddhist creed. The remaining portion may be rendered: "This [is] the pious gift of the follower of the excellent Mahāyāna, the lay devotee, the illustrious Śāmanka (?) from Magadha"

A curious fragment[2] (No. 12; ht. 30 cm., fig. 3) of sandstone from Sārnāth must likewise belong to the expiring days of Indian Buddhism. This is evident from the character of the inscription (Pl. LXIII, No. 6), which consists of two lines Nāgarī of 23 and 28·5 cm. It contains only the Buddhist creed. We are thus justified in attributing it to the Bauddha religion with which the sculpture itself does not show any connection. Over the inscription there is a nude male figure, of which the head is broken, stretched out on its back, between two kneeling figures much injured, of which that to the proper left is a woman. The other seems to be identical. They wear a girdle and a necklace. Both seem to hold a garland as an offering. Possibly the fragment belongs to a Tantric sculpture, the lying figure representing a corpse on which the deity stands. It cannot have any relation to Buddha's *parinirvāṇa.*



Fig. 3.

[1] This reading is mainly based on Kittoe's transcript.

[2] Kittoe's *Drawings*, Vol. I, No. 20.

Of the remaining pieces three (Nos. 13-15) will be found on the list [1] of objects discovered at Sārnāth in June 1855 by Professor F. E. Hall, who describes them in the following terms :—

No. 13 (Hall, No. 5). "A female head and throat, $3\frac{1}{2}$ inches (9 cm.) high, broken off from a statuette, sandstone, of very marked character, hair parted in short bandeaux in the centre, ending in a series of short curls, with a short club of hair thrown back from the top of the head; high pencilled eyebrows; half-closed eyelids; forehead and nose in one straight line; facial angle about 80; smiling expression of mouth; coloured part of the under lip marked in an exaggerated degree almost like a protruded tongue; profile very Egyptian; throat marked with two folds; long earrings."

No. 14 (Hall, No. 6). "A torso, sandstone, 8 inches (20 cm.) high; alto-relievo from throat to knee; proportions hermaphrodite; slightly draped; right hip thrown forward."

No. 15 (Hall, No. 7). "Alto-relievo fragment; sandstone, 5 inches (11 cm.) long; a female right hand, holding a custard-apple; armlet bordered above with kawris and below with gems cut in facets, and with kawris alternately; phalanges of the fingers not marked, but running into curves; ring on the little finger."

I have only to add that No. 13 is perhaps a Bodhisattva head, the prototype of which is found in Gandhāra. No. 14 is undoubtedly the torso of a standing Buddha image of the same type as the one first described (No. 1). We have in our collection another fragment (No. 16, ht. 23 cm.) of exactly the same type and material, and therefore presumably also from Sārnāth. No. $8\frac{1}{2}$ of Professor Hall's list, described as "a pinnade, 6 inches high with small figure of Buddha, cross-legged in niche; sandstone" would agree with one of the sculptures from Queen's College (No. 17) were it not for the size, which is 33 cm., *i.e.*, nearly double that of Professor Hall's specimen.

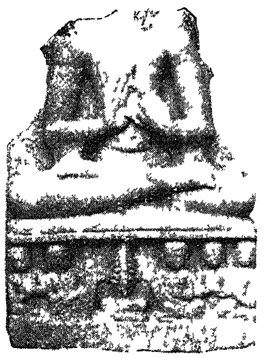


Fig. 4.

The remaining four pieces, which are all in sandstone, may be briefly enumerated as follows :—A Buddha image [2] (No. 18; ht. 31 cm.; fig. 4), the head of which is lost, seated crosslegged in *dharmacakra-mudrā*. In the centre of the pedestal a wheel and five figures, probably the five mendicant friars.



Fig. 5.

Slab (No. 19; ht. 39 cm.; fig. 5) with the figure of a Bodhisattva (Avalokiteśvara ?) seated on a lotus in "the sportive fashion" (*lalitāsana*) wearing a mitre and holding in his left hand the stalk of a lotus-flower. The right hand, which is broken, probably rested on the knee in the *vara-mudrā*, but may also have held the lotus-stalk which rises on that side. The miniature figure of a human worshipper projects from the pedestal.

Slab (No. 20; ht. 13 cm.) showing two rows each of fifteen Buddha figures seated in the attitude of meditation, the one row being placed over the other.

[1] *J. A. S. B.*, Vol. XXV (1856), p. 399.

[2] Perhaps identical with No. 59 of Kittoe's *Drawings*, Vol. I.

Fragment (No. 21; ht. 17·2 cm.) of a head with a radiating halo; probably belonging to an attendant. Of the main figure traces of the hand remain.

J. PH. VOGEL.

Postscript.—Since writing the above I received the following note from Dr T. Bloch on the inscription from Nālandā :—

"I have considered," Dr. Bloch writes, "the inscription of which you sent me an impression and propose to read:

Oṁ Śrī-Nalanda-Śrī-Dhamrahatta dedharmo=a-pratipalīta=rnaigīrīkasya Dandikasya.

and to correct this into:

Oṁ Śrī-Nālanda-Śrī-Dharmahatte deyadharmo=yaṁ pratipādita Āranyagiri-kasya Daṇḍikasya.

"The 8th letter after *oṁ* is certainly *ha* and not *bha*. As the word is a compound with *hatta*=modern *hāt*, it must be the name of a village, where the image was set up and which belonged to the district of Nālandā. It seems to me not altogether impossible that Dharmahaṭṭa may be an old name for the modern Dharawat, an ancient site in the north-western corner of Gayā District, about 30 miles west of Nālandā, where there are many Buddhist and Hindu remains.

"The *a* after *dedharmo* I take as a careless spelling for *yaṁ* (*i.e.*, *ayam*) The curious two but last letter I propose to read *ṇḍa*. *Daṇḍikasya* at least gives a good sense as a name. The sign which you read *śau* must, I think, be *ṇai*. It is, of course, possible that it may contain also a prefixed *r*, which in this alphabet is merely expressed by a short slanting line attached to the left-hand sides of the letter, and which is here as invisible as in *rmo* of *dedharmo*.

"So far I think my reading stands on pretty safe ground. But I admit that my emendation of the word *pratipalīta*, etc., is very bold. However the orthography must be far from correct. There is also the objection against it that we should expect the Instrumental *Daṇḍikena* instead of *Daṇḍikasya*. I do not think this carries much weight, as the author of this short record probably knew very little Sanskrit, and as generally only the donor's name is connected with *deyadharmo=yaṁ* in similar inscriptions without such a word as *pratipādita* or like.

"I translate:

"'This pious gift of Daṇḍika, an inhabitant of Araṇyagiri, has been presented at Dharmahaṭṭa, which belongs to [the district of] Nālandā.' I may add that before this reading and emendation occurred to me, I was inclined to read: *pratipalī Taṇyaigirīkaṣya* which I thought might stand for *Tāṇḍyagirikasya*, and *pratipalī* (*pratipālī* 'protecting') might be a title denoting Daṇḍika as a sort of frontier officer. We then would have to correct either *pratipalinas=Tāṇḍyagirikasya D.* or *Tāṇḍya-girikasya pratipāli-Daṇḍikasya*. But *pratipālin* never seems to occur in such a technical meaning, and *Araṇyagiri* seems to me preferable as a local name to *Tāṇdyagiri*."

THE MAKARA IN HINDU ORNAMENT.

ONE of the most frequently occurring decorative forms upon mediæval Hindu temples, and more especially in the Chālukyan work of the Kanarese districts, is the very conventional and highly ornate *makara*. It is mostly found at the springing of those *makara-toraṇas*, or florid ornamental arches, which are so frequently seen thrown across overhead, from pillar to pillar, in rolls and cusps of airy gracefulness; or, on a smaller scale, engirdling the tops of image niches and panels upon the temple walls. The cusped arch is usually represented as emerging from the distended jaws of one of these animals, placed upon either side; and, after mounting through several feathered foliations, the two halves meet together at the apex and enter the jaws of a *kīrttimukha* or 'face of fame'—a grotesque grinning mask, with great tusks, goggle eyes, and a pair of horns. Fig. 14, on the accompanying plate, gives a fair representation of this as it is met with in Chālukyan work. This particular example is taken from the old temple of Doḍḍa Basavaṇṇa at Dambal, in the Dharwār District, of the 11th century. The *makara* is frequently used as a gargoyle, or water spout, to carry off the ceremonial washing water from the shrine, which, passing through a channel in the walls, flows out through the animal's jaws.

The *makara*, as here portrayed, with its florid tail, is the most usual representation of the animal in mediæval work, but there are variants. The *makara* is, however, found in more ancient work, from the time of Aśoka down to the later caves; but the earlier fish-like forms are very different from those of later times, and, were it not that those early ones fulfil the same *raison d'être* in decorative details, we might almost fail to see the connection between the one and the other. The mediæval form, as represented in fig. 14, shows us a heavy-bodied, short-legged quadruped, with huge jaws, and a short curling trunk or elongated proboscis. But the glory of the beast is in its tail. This, starting in its natural place, and not from the navel, as we find is the case with the florid tails of some of the *gandharvas* in the ceilings at Abu, curls and spreads up around and over his back and haunches, in a magnificent multiplicity of elaborate flourishes and whorls, forming a fan-like display of intricate and interlacing arabesques. In some cases the body is dwarfed into insignificance beside it.

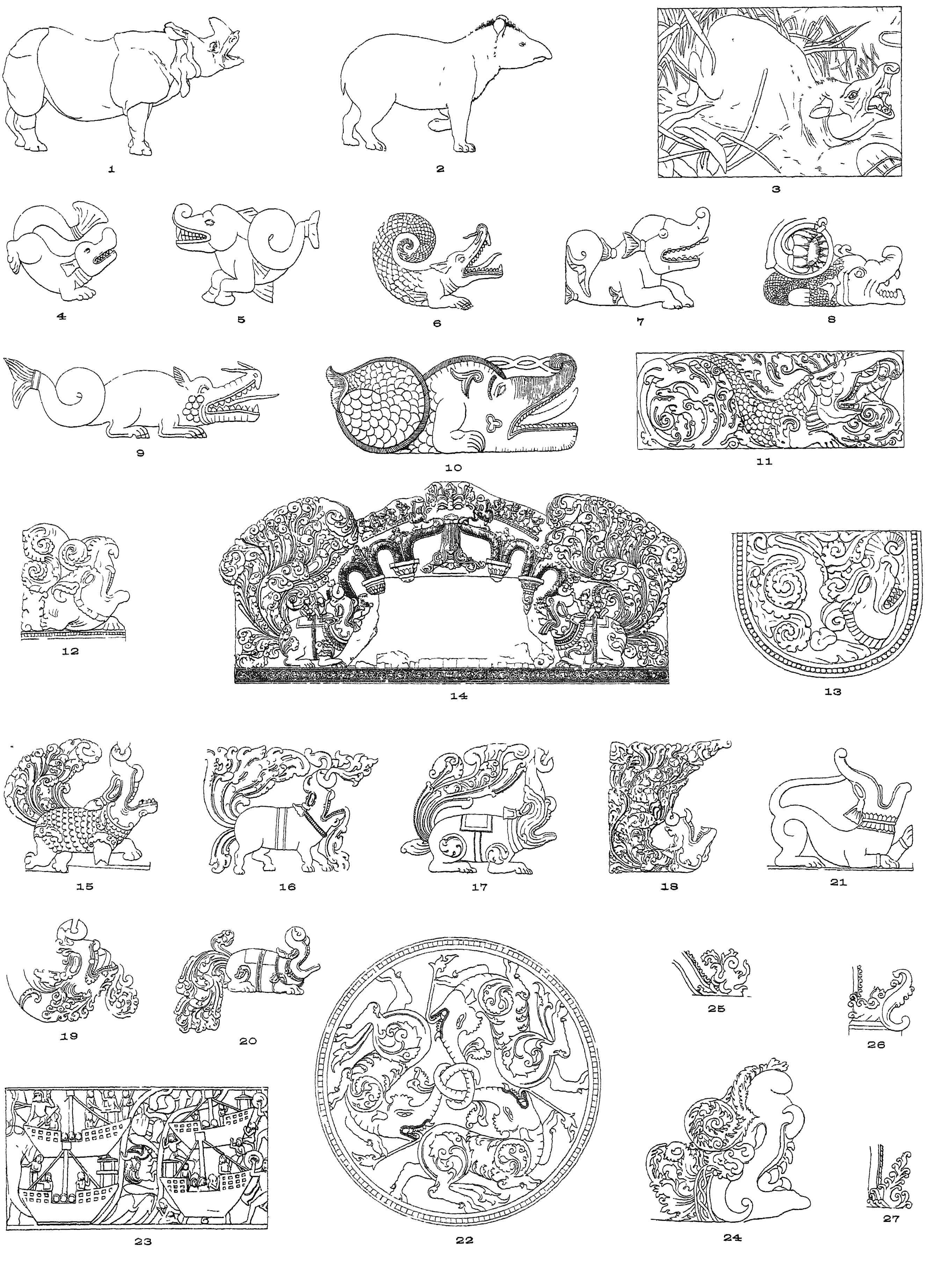
All animals that we meet with in old Hindu ornament, are, save this creature, more or less true to life and recognizable. It is noticeable that, the more rare an animal, the less true is its delineation, and the greater the liberties taken by the artist.

in its portrayal. This was, no doubt, due to the rarer animals being less available as models, and less often seen, if seen at all. Thus the artist was tempted to draw from his imagination what was denied to his sight; and, as his work was not likely to be criticized, his critics being even more ignorant than himself, he produced some wonderful and fearsome forms. The *makara*, whatever its origin, was to him what the dragon was to old European artists—a mythical beast, with some general characteristics and a generally accepted form, the details of which could be worked out as the fancy of the artist suggested. The lion, for instance, is far less true to life than the homely, domesticated elephant or bull, and often it is difficult to tell whether a certain form is intended for that animal or a tiger.

As already shown, the part of the *makara* least true to life is his tail, which is no tail at all in the true sense, but a highly ornate appendage of flowing arabesque. This would argue that the sculptor knew less about this extremity of the beast than the rest of his body; and that I believe, for the very good reason that the original animal had no caudal appendage, or, at most, an economically small stump Having a thick hide, that no living fly could make an impression upon, a tail would have been superfluous, save as ornament; and it was for this purpose the sculptor supplied the deficiency from his own designs. The animal was, no doubt, first appropriated for its very accommodating jaws and prehensile proboscis. The elephant, though possessing the latter member to perfection, has a contemptibly poor mouth for decorative treatment.[1]

As to the prototype of the mediæval *makara* it is not easy to fix it. The word *makara* ('magar' or 'mugger') usually signifies an alligator or crocodile, but the *makara*, as represented, does not suggest either of these animals. In the earliest examples, such as those at Mahabodhi, Bharhut, and Sānchi, figs. 4 to 7, we find a two or four-footed beast with a fish's tail, a crocodile's head and snout, loose flapping ears, and the body, in some cases, partly covered with scales. Here the tail has been the weakest part. The artist clearly intended to represent the crocodile, but he was not so sure about the tail, which, when the animal was seen, was, more often than not, obscured by trailing in mud and water. Prudence forbade him satisfying his curiosity by a closer examination, and, as it was partly a water animal, he naturally supposed it to have a fish's tail and scales, and so portrayed it. The transition from the knob on the snout to the short curled proboscis is well shown in figs. 4 to 11, and the flowing tail of arabesque has begun in fig. 11 and is fully developed in fig. 13. Between figs. 13 and 14 an entirely new body has been introduced—the body which it is so difficult to identify. Of all animals, approximating to this mediæval delineation, the rhinoceros and tapir are the nearest. The former has been, and still is, a native of India, but whether the tapir ever was, I have been unable to ascertain. The nearest spot, where it is at present found, is Sumatra and Java, where the *makara* is used on the Bôrô Budur monument (figs. 24 to 27). Figs. 1 and 2 show the

[1] In *Buddhist Art in India*, by Prof. A. Grunwedel (translated by Dr. Jas. Burgess), an illustration of a *makara* is given on page 57, which has an elephant's head, but it appears to be quite modern, and is taken from the ornament upon a dress. A footnote refers to three other examples. Rājendralāl Mitra's Budh Gaya I have not with me as I write, but the other two illustrations, from Cunningham's *Mahabodhi* and Burgess's *Cave Temples*, are not of the *makara* but of winged elephants. On the same plate in the *Mahabodhi*, referred to, fig. 18, there is a true early form of the *makara* which I have reproduced on the accompanying plate, reversed, fig. 4.



THE MAKARA IN HINDU ORNAMENT.

rhinoceros and tapir, traced, respectively, from a photograph and a woodcut, while fig. 3 is a tracing from a woodcut in the *St. Nicholas Magazine*[1] depicting the attack of a jaguar upon a tapir in the forests of Brazil. The great similarity between the beast here, in a state of fear and agony, with the mediæval representation of the *makara*, is most striking; and, did we know that the tapir was ever a native of India, we might rest assured that it was the prototype of the *makara*. There is the same elongated proboscis or short trunk, slightly curled at the end, the same large ear lobes thrown flat back, and the same rows of teeth with four large tusks.

That the original animal was amphibious is shown plainly in the early crocodile and fish-like forms, where it is provided with legs, and in the mediæval variety, where, in the temple of Vimala Shāh on Mount Abu, twelve hundred years later, fig. 23, it is shown as standing in a river, stocked with fish and tortoises. If we take the purely Indian beast, the rhinoceros, it is not easy to account for the absence of the horn. It is easy enough to understand how the prehensile upper lip of the earlier *makara* became, in a country of elephants, stretched still further into the longer trunk, as represented in fig. 22, an altogether modern representation. Here the body and legs are also more attenuated. The ears of the rhinoceros are set much higher in the head than in the *makara*; in fact, they are close together on the crown of the head, whereas those of the tapir, especially when dropped in fear, correspond better with those of the *makara*. In neither animal is there any tail to speak of, and this fact gave the artist the chance of drawing upon his own fertile imagination to supply what was lacking; for, without some sort of appendage, the fat beast would have looked somewhat unlovely. The scrolls, starting from under the belly, and curling up on to the flanks, might have been suggested by the overlapping rolls of thick skin in the rhinoceros; and the scales, shown in fig. 15, by the knobbly appearance of its hide.

Of the rhinoceros we have the following description: "His under lip is like that of an ox but the upper more like that of a horse; using it, as that creature does, to gather hay from the rack, or grass from the ground; with this difference, that the rhinoceros has a power of stretching it out above six inches, to a point, and doubling it round a stick or one's finger, holding it fast; so that, as to that action, it is not unlike the proboscis of an elephant;"[2] and, again, "Its hide is of a dark greyish brown colour, very thick and covered with scaly incrustations (giving it somewhat of the appearance of the excoriated bark of the maple tree), and about the joints of the body it hangs in large folds . . . . . . the upper lip is very flexible, capable of elongation, and possesses a finger-like extremity with which the animal can grasp its food, but when not in action it curls over the lower lip, which is rather square, and very broad."[3] Of the tapir we are told, "the neck is flattened at the sides, and arched above, where it is furnished with a mane of short hairs; the eyes are small but quick; the ears are pointed; the snout is well adapted for searching in the ground for roots, and it resembles a proboscis in being prehensile and capable of elongation; . . . . sometimes it enters the water deliberately, and swims on the surface; at

[1] For October, 1892.
[2] Jardine's *Natural History: Mammalia* (Edinburgh, 1836).
[3] J. H. Fennell: *Natural History of British and Foreign Quadrupeds.*

other times, especially when in danger, it plunges in, and walks along the bottom, totally immersed for at least a couple of minutes and then rises to the surface to breathe, and having done so, either dives down again or swims."[1]

The dictionaries define the *makara* as "A kind of sea animal, a crocodile, a shark" . . . . "A kind of sea monster confounded with the crocodile, shark, dolphin, etc. (properly a fabulous animal regarded as the emblem of Kāma deva)" . . . . . "Name of a mythical fish or sea monster" . . . . . . "An aquatic monster, understood usually of the alligator, crocodile, shark, but, properly, a fabulous animal" . . . . . "A marine monster, confounded usually with the crocodile and shark, but, properly, a fabulous animal—as a fish it might be conjectured to be the horned shark, or unicorn fish."

There are many references to the *makara* in Hindu literature. The Bhagavad-gītā,[2] in Kṛṣṇa's address to Arjuna, says, "Among the purifiers I am the wind; I am Rāma among the armed men; I am *makara* among fish, and I am Jāhnavī among the rivers." And in the Pañcatantra,[3] "And there under that tree, once upon a time, a *makara*, by name Karālamukha (having a terrible jaw) came up out of the sea and sat on a spot close to the bank of soft sand." The same work further tells us[4] that Piṅgala, who was the ocean of the knowledge of metrical science, was killed on the sea shore by a *makara*. The Trikāṇḍaśeṣa[5] enumerates several varieties of sea monsters under such names as *jalarūpa*, *makara*, *maroli*, *asidaṁṣṭraka*, which are practically synonymous terms. In a list given in the Abhidhāna-cintāmaṇi[6] the *makara* is mentioned as an aquatic animal. It is also mentioned in a similar manner in the Bhāgavata-purāṇa,[7] Hārāvalī, Amarakośa,[8] Halāyudha,[9] Lalita-vistara,[10] Suśruta,[11] Medinīkośa,[12] Vājasaneyisaṁhitā,[13] etc. These all make the *makara* an aquatic animal, and, since it could come up and kill a man upon dry land, an amphibious one also. Thus we find in the earliest representations, such as in figs. 4 to 11, they were divided between a great fish and a crocodile. And, curiously enough, the name is still applied to the former, for, in a newspaper account of a huge shark captured at Feroke in Cochin, two years ago, which measured eighteen and a half feet long, it is stated that the natives there called it a *makara-matsyam*.

The *makara* is used as one of the Hindu signs of the zodiac, namely that for Capricornus, and, when depicted as such in mediæval carving, it has the shape as in fig. 16. It is the cognisance of Puṣpadanta, the ninth *tīrthaṅkara* of the Jainas. The banner of Kāmadeva is known as the *makaradhvaja* or *mīnadhvaja*, *mīna* meaning a fish; and the vehicle of Varuṇa, the god of the waters, is the *makara*. He is represented riding upon it in those richly sculptured *aṣṭadikpāla* ceilings where he holds the post of Regent of the West. A favourite shaped earring is called a *makarakuṇḍalaṁ*, and is shown as worn in the left, or Vaiṣṇava, ear of statues of the dual god Harihara; the right, or Śaiva, ear having a *nāga* earring called a *nāgendra-kuṇḍalaṁ*. These are the customary earrings worn by these two gods. Each river goddess has her favourite animal, that of Gaṅgā being the *makara*.

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[1] J. H. Fennell, *op. cit.*
[2] Chap. 10; *Śloka*, 31.
[3] Fourth *Tantra*.
[4] Second *Tantra*; *Śloka*, 33.
[5] I. 2, 22; III, 3, 67.
[6] *Tiryakkāṇḍa caturtha*, *s.* 417.
[7] III, 10, 19-23.
[8] I, 10, 20.
[9] III, 38.
[10] 383, 9; 432, 4.
[11] I, 206, 27.
[12] 200.
[13] XXIV, 35.

In the accompanying plate we have examples from B.C. 250 down to the present time. Fig. 4 is from Aśoka's railing at Mahabodhi, Budh Gaya, of about B.C. 250. Nos. 5 and 6 are from the Bharhut *stūpa*, of very nearly, if not quite, the same age. It will be noticed how the knob on the snout of the crocodile has developed into a curled upper lip. No. 7 is from the Sānchi gates, of about the beginning of the Christian era, while fig. 8 represents a *makara* carved on a Buddhist *pādukā* slab found at Tēr, of which a description was given in the last Annual Report. Nos. 9 and 10 are from Mathurā, and No. 11 is from a cave at Aihoḷi of about the sixth century. It will be seen that in this last example the curl of the newly developed proboscis is inwards and downwards, and not backwards, as in the previous examples. In this respect the idea of the trunk, or proboscis, of the elephant, rhinoceros, or tapir, is apparent, and that of the knob on the crocodile's snout has dropped out. Though there is a marked difference in the delineation of the two *makaras*, they seem to have overlapped in their use, in point of time, for we find the later development, or, at least, the head, forelegs, and florid tail, in sixth century cave architecture. Figs. 12 and 13 are from the Kānheri and Ajantā caves, respectively. Figs. 14 to 20 are nearly all from Chālukyan temples of the twelfth and thirteenth centuries, and show, in most cases, the full body of the animal. A *vīrāgal*, or memorial slab, at Murdeśvara in North Kānarā, of two centuries later, supplies fig. 21, where the body partakes more of the outline of the conventional Hindu lion. It will be noticed how exactly like the very earliest the ear-lobe is here, although seventeen centuries have intervened. Examples 24 to 27 are from the Boro Budur in Java, and show how the head, in 24, has passed into pure arabesque in 27. Fig. 22 is from a modern painted decoration, and much resembles the later carving No. 21.

HENRY COUSENS.

EPIGRAPHY.

IN the field of Epigraphy the efforts of the Survey have, so far as India proper is concerned, been more evenly distributed over the country than has ever been the case before. This perhaps is not to be wondered at, seeing that the *personnel* has never before been so strong. As now equipped, the Survey possesses well qualified Sanskrit epigraphists in every circle, in addition to the special staff which is maintained to deal with South-Indian inscriptions; besides which a first-rate scholar has been appointed to supervise the collection and publication of Moslem records—a branch of work that had hitherto been sadly neglected.

In the collection of inscriptions of Southern India a record has been established in the past year by the Government Epigraphist. During the field season he visited over fifty sites in the Madura, Tinnevelly, North and South Arcot, Trichinopoly and Madras districts, and copied upwards of 800 new epigraphs, making a particular point of starting with those temples which were threatened with destruction or defacement, and copying their records before they could be obliterated. Brief notes on 617 of these are to be found in his Provincial Report, together with more detailed information regarding some of the more important ones. Among items of particular interest may be noticed the discovery of a Pallava inscription in the Triplicane temple at Madras and of ancient Tamil records in a tract of country where the prevailing language is at present Telugu. The Rāṣṭrakūṭa, Calukya, Hoysaḷa and Vijayanagar inscriptions copied in the Bellary district furnish valuable additional information relating to the histories of those dynasties. The invasion of the Calukya dominions by the Cōḷa king Rājarāja I. (A.D. 985 to 1013), which is testified to by inscriptions in the Tamil country and by a record in the Dharwar district, is an important historical event which was followed by other encounters between the Cōḷas and Calukyas during nearly three-quarters of a century. The mention of the Kallēśvara temple at Bāgali in a Calukya inscription of A.D. 1018 is interesting, because, according to Mr. Rea, "the shrine and enclosed front *maṇḍapa* are, in detail, mainly Dravidian, with Calukyan features interspersed." The approximate date of three ancient temples in the Trichinopoly district is furnished by some of the Cōḷa inscriptions copied in them during the past year. Of the records in the upper cave in Trichinopoly town rendered accessible by the removal of the modern brick walls an account will be found in the separate article by Mr. Venkayya. Some details regarding Cōḷa history are also supplied by the fresh materials of which it is enough here to note the Śaka date mentioned along with the regnal year of Vīrarājendra I. Professor Kielhorn's calculation of the date of accession of another Cōḷa king marks

another important step in elucidating the history of that dynasty. A number of inscriptions were copied belonging to the Sāḷuvas, who usurped the Vijayanagar sovereignty towards the close of the 15th century and enjoyed it for a short interval. The construction of the big tower at Kālahasti, ascribed to the Vijayanagar king Kṛṣṇarāya in a Tiruvaṇṇāmalai inscription noticed in last year's Report, is confirmed by a Telugu record found at Kālahasti itself. The remission of revenue which the same king is reported to have made in favour of certain temples is also corroborated by two Tamil inscriptions. The later Vijayanagar records found in Triplicane show that two of the suburbs of Madras and three of the outlying villages had been granted to the local temple and that certain additions were made to that temple in A.D. 1564-65.

Before leaving the subject of South-Indian inscriptions, I should like to give a short account of a series of important copper-plates that have come to light at Tiruvālaṅgāḍu, just as this Report is going to Press. Their discovery does not belong, it is true, to the year under review, but they are of such exceptional interest as to merit notice at the earliest opportunity, and I may be pardoned, therefore, if I anticipate here the fuller description which will appear in the Annual Report of the Government Epigraphist. Tiruvālaṅgāḍu [1] "the sacred banyan forest" is a village in the Kārvēṭnagar *zamīndārī*, 7 miles east-north-east of Arkonam Junction and three miles north of the Tiruvālaṅgāḍu station on the Arkonam-Madras section of the Madras Railway. The village is mentioned in the Tamil poem *Periyapurāṇam* in connection with the Śaiva devotee Kāraikkāl-Ammaiyār, who lived prior to the 7th century A.D. The antiquity, which is thus established for the place, evidently led the Nattukkottai Chetties to undertake the repair of the much-frequented Vaṭāraṇyeśvara [2] temple. While excavating two of the shrines in this temple the Chetties found a number of copper images, gold and silver jewels, vessels, etc., together with a string of copper-plates weighing 8 maunds, 2 viss and 20 palams. The plates were examined almost at once by Mr. Venkayya's assistant, K. V. Subrahmanya Aiyer, who happened to be copying inscriptions in the district, and afterwards by Mr. Venkayya himself, to whom I am indebted for the notes which follow.

The plates, whose rims are not raised, are 31 in number and measure about 1 foot $\frac{1}{2}$ inch in length and about $6\frac{1}{2}$ inches in height. They are strung on a massive ring which is almost circular and which measures about 1 foot $4\frac{3}{4}$ inches in diameter. The circumference of the ring is 4 feet $5\frac{1}{2}$ inches, and its thickness $\frac{7}{8}$ inch. The ends of the ring are secured at the base of an eight-petalled lotus,[3] supported on a comparatively thicker segment of the ring, which measures $8\frac{1}{2}$ inches. On each side of the bottom of the lotus the figure of a *yāḷi* is cut in relief on the thickened segment of the ring. The royal seal, which is circular, measuring $4\frac{7}{8}''$ in diameter and $\frac{3}{8}''$ in thickness, rests on the expanded eight-petalled lotus already mentioned. In the centre of the seal is a tiger—the Cōḷa crest—(with its mouth open) seated (facing the proper right) on its hind legs, with the tail drawn through them and reaching to very near its mouth.

[1] Three stone inscriptions were copied at this village in 1896 and one of them, belonging to the 2nd year of Rājakesarivarman Rājendra-Cōḷa (*i.e.*, the Calukya Cōḷa Kulottuṅga I.), is published in Dr. Hultzsch's *South-Indian Inscriptions*, Vol. III, Part II, p. 134.

[2] *Vaṭāraṇya* is the Sanskrit equivalent of the Tamil *ālaṅgāḍu*, 'the banyan forest.'

[3] The "16 knobs at about equal distances from each other round the margin" of the seal in the large Leyden grant, are evidently the 16 petals of the lotus on which the seal rests; see Vol. IV of the *Archæological Survey of Southern India*, p. 204, where a description of the large Leyden grant is given.

On its front are two fish—the Pāṇḍya crest—and underneath the tiger and the fish is a bow—the Cēra crest.[1] Behind the tiger is a lamp-stand, a spear, a flag (?) and what may be taken for a scimitar; and behind the two fish a lamp-stand, a spear, a flag (?) and a hatchet(?).[2] Over the fish and the tiger is a parasol with a *chauri* on each side of it. The tiger, the two fish, the lamp-stands, spears, flags, the hatchet and the scimitar, all stand on the string of the bow. Within the space occupied by the bow itself are figured the following from left to right:—a water-pot (?); a stand with a dish on it; a drum between two vertical poles, with a horizontal one over them (the former terminating in tridents over the latter); a boar—the Calukya crest—facing the proper right and a *svastika*. All these symbols are engraved in relief on a countersunk surface within a well-raised circle. Outside this circle in raised Grantha characters is the following legend (consisting of the syllables *svasti śrī* and a Sanskrit verse in the *Anuṣṭubh* metre) running round the margin of the seal:—*Svasti śrī* [||*] *Rājad-rājanya-makuṭa-śreṇi-ratneṣu śāsanam* [|*] *etad-Rājendra-Cōḷasya Parakesarivarmmaṇaḥ*[||*].[3] "Hail! Prosperity! This (is) Parakesarivarman Rājendra-Cōḷa's edict (to be borne) on the glittering jewels of the row of royal diadems (*i.e.*, to be respected by them)." The legend and most of the emblems on the seal are thus the same as those on the seal of the large Leyden grant. The addition of the boar on the seal of the former is significant and may be due to the king's conquest of both the Eastern and Western Calukyas, whose crest it was.

The first nine plates and a part of the first side of the tenth are in Sanskrit, while the remainder of the tenth is in comparatively modern Tamil characters.[4] Plates 11 to 31 are also in Tamil, but belong to the same period as the Sanskrit portion, which gives a long genealogy of the Cōḷas down to the donor Rājendra-Cōḷa I. (A.D. 1011-12 to 1043-44). The great importance of the inscription thus lies in its Sanskrit portion, as the only other record hitherto known which furnishes the genealogy of the Cōḷas, is the large Leyden grant. The Tamil portion of the Tiruvālaṅgāḍu plates is dated in the 6th year of Rājendra-Cōḷa's reign (A.D. 1016-17) and the Sanskrit portion also refers to the grant having been made in the same year. But the conquest of Kaṭāha[5] (in Burma), which, as we know from other inscriptions of the king, actually took place in the 15th or 16th year of his reign, is mentioned in the Sanskrit portion. It has, therefore, to be concluded that, as in the Leyden grant, the

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[1] That the Cēra bow is also figured on the seal of the large Leyden grant appears from Vol. IV, p. 204, of the *Archæological Survey of Southern India*, where the circle enclosing the emblems is said to be "double below." Compare the seal of the Madras Museum plates of Uttama-Cōḷa figured on the plate entitled "Seals of copper-plate grants" facing p. 104 of *Epigraphia Indica*, Vol. III. In Nos. 152, 153 and 154 of Sir Walter Elliot's *Coins of Southern India* (Pl. IV) the Cēra bow is figured behind the tiger. No. 152 was issued by Rājendra-Cōḷa I., the donor of the Tiruvālaṅgāḍu plates.

[2] The two flags, the scimitar and the hatchet, as well as the emblems figured within the bow, which will be mentioned presently, are not found either on the seal of the large Leyden grant or on that of the Madras Museum plates of Uttama-Cōḷa.

[3] The same verse is engraved at the commencement of two inscriptions of Rājendra-Cōḷa I. found at Kandiyūr in the Tanjore District (Nos. 22 and 23 of the Government Epigraphist's collection for 1895). The legend on the seal of the large Leyden grant consists also of the same verse. The reading of it published on p. 204 of Vol. IV of the *Archæological Survey of Southern India*, coupled with the note which follows it, confirms this view.

[4] It is dated in the 6th year of some king whose name is not given. It is not impossible that the grant recorded in it was made in the reign of Rājendra-Cōḷa I. but copied at a later period into the space left vacant on the tenth plate when the Sanskrit *praśasti* was engraved.

[5] *I.e.*, Kaḍāram in Tamil.

Sanskrit *praśasti* of the Tiruvālaṅgāḍu plates was added subsequently to the Tamil portion, which actually contains the king's order (issued in the 6th year of his reign). In the large Leyden grant the Tamil portion is dated in the 21st year of the reign of Rājarāja I. (A.D. 985 to at least 1013), and does not mention the conquest of the Western Cālukya dominions, which is referred to in later records of the same king. The Sanskrit *praśasti*, which was composed after the death of Rājarāja I. during the reign of his son Madhurāntaka (another name of Rājendra-Cōḷa I.), specifically alludes to the conquest of the Western-Cālukya king Satyāśraya by Rājarāja I. Thus it appears that the Sanskrit *praśastis* (containing the genealogical portions) in the large Leyden grant and in the Tiruvālaṅgāḍu plates were composed during the reign of the Cōḷa king Rājendra-Cōḷa I., the former about the beginning of his reign and the latter after the 15th or 16th year. The preliminary study of the latter which Mr. Venkayya has been able to make shows that it contains a great deal of fresh information not found in the large Leyden grant. The sources of information accessible to one of the composers may, under ordinary conditions, be supposed to have been available for the other. It is therefore not easy to explain how the author of the later *praśasti* managed to put in the additional information about the early Cōḷas.

The object of the Tiruvālaṅgāḍu plates is to record the grant of the village of Paḻaiyanūr to the Śiva temple at Tiruvālaṅgāḍu. The Tamil poem *Dēvāram* composed in the 7th century A.D. refers to the same temple as Paḻaiyanūr-Ālaṅgāḍu, *i.e.*, Ālaṅgāḍu or Tiruvālaṅgāḍu (near) Paḻaiyanūr. A Tamil inscription of A.D. 1071-72 speaks of it as "Tiruvālaṅgāḍu near Paḻaiyanūr."[1]

In other parts of India—excluding, that is, the Southern Presidency—somewhat more than 200 epigraphs in all have been either copied or secured in the original; to which also must be added the series of seal records, which will be found published *in extenso* in the preceding section of this volume. Conspicuous among this collection are the Prākrit inscriptions from the Kamāl Maulā mosque at Dhār in Central India, which I noticed by anticipation in last year's Report, and of which a more detailed account from the pens of Professors Pischel and Hultzsch is contained in a separate article printed below.[2] Other inscriptions from the circle of Western and Central India are mainly of interest for the history of the particular buildings or localities to which they belong. Thus a considerable amount of fresh evidence has been gleaned from the records on the Chitorgarh rock as to the date of the temples and towers in that fortress. One of these records, of which a plate was published by Sir A. Cunningham some years ago,[3] is of particular value, as it supplies us with a variety of information about Kuṁbhakarṇa's family and exploits, and the buildings which he raised. Of more general interest are two epigraphs which contain references to the family of the Kalacuri rulers of Ratanpur: the one from Akaltārā,[4] the other from Sēōrī Nārāyan[5] in the Central Provinces.

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[1] *South-Indian Inscriptions*, Vol. III, Pt. II, p. 134.

[2] A point of some interest in the *praśasti* of Arjunavarman relates to the identity of the prince Jayasiṁha of Gūrjara. Prof. Hultzsch believes him to be the same as Bhīmadeva II. of Aṇahilapātaka; but see *Progress Report of the Archæological Survey of Western India*, 1903-04, p. 19.

[3] *A. S. R.* (C. S.), Vol. XXIII, Pl. XXI.

[4] *Archæological Survey of Western India: Progress Report*, 1903-04, p. 51.

[5] *Op. cit.*, p. 53. For date of inscription, see *A. S. R.* (C. S.), Vol. XVII, Pl. XX.

In Chambā State Dr. Vogel has been continuing his investigations of previous years and has succeeded in adding a considerable number more copper-plates to those already collected. The new plates are for the most part of a comparatively late date, but they possess, notwithstanding, considerable historical value, as will appear from the grant of Bahādur Siṅgh, which is edited by Dr. Vogel in the present volume. The original of this plate is in possession of the Chambā Rājaguru, to one of whose ancestors it was granted. But there can be little doubt that Bahādur Siṅgh, the donor of the grant, was the Rājā of Kuḷlū of that name, who was the first to extend his territories over the whole of the Upper Biyās valley. He also founded the famous temple of Hiṛmā or Hiḍimbā Devī at Manālī, remarkable for its style and profuse wood-carving. Thus the copper-plate, in fixing Bahādur Siṅgh's reign, establishes at the same time the date of that building. Another interesting discovery was a well-preserved Śāradā inscription on stone, found in the village of Sarāhan, eight miles from Chambā town. It was engraved by order of Sātyaki, the son of Bhogaṭa, presumably a local chief, or *rāṇā*, and contains a eulogy of the beauty of Somaprabhā, his spouse, in elegant Sanskrit poetry, winding up with the record of the foundation of a temple to Śiva "the moon-crowned." The epigraph is undated, but judging from its character, must be contemporaneous with the copper-plates edited in the previous Annual Report of the Archæological Survey.

One other inscription from the Punjab also deserves notice, *viz.*, a fragmentary *praśasti* discovered in a ruined tank at Sirmor and procured through the instrumentality of Mr. H. A. Rose, C.S. The record, unfortunately, is much broken and parts only of 8 lines still survive. "This," says Dr. Vogel,[1] "is all the more to be deplored as evidently the *praśasti* was composed in good Sanskrit poetry of a highly developed *kāvya* style, in which a great variety of metres were used." The date is given as *Saṁ* 17, but this evidently refers to the *Lokakāla* era, in which the hundreds are omitted. On palæographic grounds, Dr. Vogel assigns it to the 10th century A.D.

Of the inscriptions from Bengal the majority are dealt with separately in various chapters of this Report, *viz.*, the large collection of seal records from Basārh in the chapter relating to the excavation there; the rock-cut inscriptions on the Rāmgarh Hill in the article immediately following it; and the series of temple inscriptions at Vishnupur in Dr. Bloch's account of conservation in Bengal. These, then, need not claim our attention again, and as regards the rest, there are none of sufficient general interest to call for notice here. Let it be mentioned, however, in passing, that the two records from the Muṇḍeśvarī Hill, which were referred to in last year's Report, have now been deposited in the Calcutta Museum; and that arrangements have also been made to raise upon a proper masonry platform the pillar in the temple of Varuṇārka at Deo-Bonarak, on which the valuable historical record of Jīvita Gupta is inscribed.

In Burma, the collection of material has been greatly hampered by the urgent claims which conservation has made upon the time of the local Superintendent, and only three new records have been discovered during the year. These are from Pagan, one of them being undated and the other two dated in the 12th and 13th centuries

[1] See *Progress Report of the Archæological Superintendent, Punjab and United Provinces,* 1903-04, pp. 59-60.

respectively. The last-mentioned, which was found near the Mingalazedi Pagoda, is of unusual interest, as it records "the conduct of negotiations between the Burmese king Tayōkpyemin and the Chinese Commander-in-Chief just before the Chinese invasion of Burma. Disā-pāmokka, the Royal Preceptor, acted as the king's Envoy. The negotiations broke down; the Chinese overran Pagan; and the Burmese king fled to Bassein.

J. H. MARSHALL.

INSCRIPTIONS FROM DHĀR.

[On pages 17—18 of last year's Report a preliminary account was given of several important inscriptions which had just been brought to light in the *miḥrāb* of the Kamāl Maulā Mosque at Dhār, and a further notice of this discovery is included in Captain Barnes' article on Conservation Work at Māṇḍū and Dhār in the present volume. Facsimiles of the inscriptions were sent to Professor Hultzsch and through him to Professor Pischel, and to these two scholars our thanks are due for the following contributions. The texts are to be published *in extenso* in a forthcoming number of the *Epigraphia Indica*.—Ed.]

IN his Report, dated Dhār, 30th December 1903, Mr. K. K. Lele, Superintendent of Education, Dhār, first brought to the notice of Sanskritists the discovery of two long inscriptions and several fragments found in the Bhojaśālā at Dhār in November 1903. One of these inscriptions and two large fragments are in Prākrit. Through the kindness of Professor Hultzsch, to whom excellent estampages had been sent by Mr. Marshall, I have been able to examine the Prākrit inscriptions. Reserving a fuller account to the edition of the text which I am preparing for the *Epigraphia Indica*, I confine myself here to a few remarks on the language and the literary value of the new finds.

The complete inscription consists of two odes to the Tortoise incarnation of Viṣṇu. The first is attributed to king Bhoja himself and called *Avanikūrmmaśatam*, the colophon running thus: || *iti mahārājādhirājaparameśvara śrīBhojadevaviracitam Avanikūrmmaśatam* || || *maṅgalaṃ mahāśrīḥ* || || It begins with an invocation of Śiva in Sanskrit: *oṁ namaḥ Śivāya*, while the ode itself is throughout written in Māhārāṣṭrī and in the Āryā metre. The number of stanzas is 109. In the first three stanzas Śiva is invoked; in the rest the poet, who has suppressed his own name in favour of king Bhoja, varies two themes, *viz.*, that as to strength nobody can be compared with the Tortoise that bears the earth, and secondly, that there is no woman happier and more highly to be praised than the female Tortoise that has so excellent a son. In stanza 107 it is stated that even to the Tortoise rest has been granted by king Bhoja, who, after having destroyed the hopes of the enemies, has composed this *Kūrmmaśata*:

Kummassa vi vīsāmo dinno ĕkkeṇa Bhoarāeṇa |
hariūṇa veriāsaṁ kummasayaṁ viraïaṁ teṇa ||

This stanza forms the transition to the second ode, which in 109 equally tedious stanzas in Āryā metre glorifies king Bhoja as having taken upon himself the burden of the earth and thus having disburdened the Tortoise. Though in the middle of the poem Bhoja is constantly addressed, yet at the end the ode is attributed to him :

Kulagiriṇo bhūmiharā sayalā vi hu lahuiā ihaṁ jeṇa ।
teṇa sayaṁ nimmaviaṁ eaṁ siri Bhoarāeṇa ||

"By whom all the principal mountains which bear the earth have here been eclipsed, by him, the illustrious king Bhoja, has this Century been composed."

This second ode has no title. With the exception of a few syllables in stanzas 87 and 90 and a few single letters here and there, the first poem is in a state of perfect preservation. The second is more seriously damaged. Of a good many verses down from stanza 69 one-quarter or even one-half is lost, so that it is not possible to restore the text.

The language is Māhārāṣṭrī written in the orthography peculiar to the Jainas. There are, however, a few exceptions. Generally *y* between an *i* sound and an *a* sound is omitted, as in *dhariaṁ* (1, 1). But we also find °*jāīya* °(1, 15), °*virahiyāṇaṁ* (1, 24), *cariyāyārehiṁ* (1, 48), and *gaṇiyāṇaṁ* (1, 54). In 1, 29 we read side by side *bhaṇṇæ annaṁ*. The author does not write idiomatic Prākrit. There occur, it is true, several *deśīśabdas* and a number of grammatical forms, which have not as yet been found in any other text. But generally the Prākrit is only Prākritised Sanskrit, and the author has committed not a few blunders against grammar. Thus we find *jan na* (1, 28) and *tan na* (1, 43) instead of *jaṁ na* and *taṁ na*, *kin teṇa* (1, 56) instead of *kiṁ teṇa*, and so on. Still worse are blunders like *cintaṁtehim vi* (1, 34) instead of *cintantehiṃ pi*, which occur very often, and *gauravam* (2, 62), *gauraviaṁ* (2, 92), *gauraviā* (2, 105) instead of *go*° or *gaü*°; but the worst of all is *ṭhiam* (2, 36). I have no doubt that all these mistakes must be debited to the author's account. His odes are a very poor performance, abounding in tautologies and hackneyed phrases. When he has been happy enough to invent a new word or a new idea, he does not scruple to repeat it several times running. Thus, for instance, it occurred to him that nobody has been, nor will be, born similar to the Tortoise, and he gave vent to his feelings in stanza 10 by the words: *teṇa Kamaḍheṇa sariso na ya jāo nea jammihü*. So much was he pleased with his discovery that he repeated it no less than four times: *jīe taṇayassa sariso na ya jāo nea jammihü* (1, 16); *Kacchavasaricchaeṇaṁ na ya jāo nea jammihü* (1, 48); *jassa sariccho bhuaṇe na ya jāo nea jammihü* (1, 55); *taha vi tuha kumma tullo na ya jāo nea jammihü* (1, 85). Many more similar instances might be adduced.

Tradition has it that king Bhoja was a great patron and benefactor of poets and learned men. In legendary works like Merutuṅga's *Prabandhacintāmaṇi* and Ballāla's *Bhojaprabandha* nearly all the famous poets of India are placed at his court. To himself are attributed numerous works on rhetoric, lexicography, grammar, medicine and astronomy, the most celebrated of which is the *Sarasvatīkaṇṭhābharaṇa*. Verses of his have been received into the anthologies, and he is quoted as an authority on Prākrit grammar by Appayadīkṣita. Our poems show that at all events king Bhoja had a very bad taste and was very susceptible of flattery, a fact that fully agrees with what we learn from the *Prabandhas*.

Of the fragments all that can be said at present is that in all probability they belong to odes to Bhoja of vast dimensions. The larger fragment opens with stanza 49 and ends with stanza 57. The colophon, as far as it is preserved, runs thus: *iti mahārājādhirājaparameśvara śrīBhojadevaviracitah Kodaṇda*. This may be

meant for *Kodaṇḍastavaḥ*, and the poem may have praised the bow of Bhoja, who is several times harangued in the middle of the fragment. Thus Rāmabhadradīkṣita wrote a *Rāmacāpastava* and a *Rāmabāṇastava*, both edited in the Kāvyamālā, Part XII, p. 1ff., and to an anonymous author we owe a *Khaḍgaśataka*, published in the Kāvyamālā, Part XI, p. 32ff.

The smaller fragment opens with ‖ *oṁ namaḥ Śivāya* ‖ *jattha payarisā* or °*so*, after which follows a long gap, the first preserved number of a stanza being 16, the next ones 32, 40, 63, 71, 79, 153, and so on, the last 565. This, however, was not the last stanza of the poem itself. The concluding words of the fragment: *siri Bhoa tujjha kittī tihua*[*ṇa*], show that the poet still went on making verses. There are many complete half verses in both fragments, but hardly a whole stanza, so that it will be difficult to publish the text in a satisfactory manner.

R. PISCHEL.

Dhār Praśasti of Arjunavarman.

This inscription was recently discovered at Dhār, the ancient capital of the Paramāra kings of Mālava and the present chief town of a State in Central India. The news of the discovery reached me through Mr. K. K. Lele, Superintendent of Education, Dhār, who was good enough to send me a copy of his well-written 'Summary of the dramatic inscription found at the Bhojaśālā (Kamāl Maulā Mosque), Dhār, Central India, in November 1903.' According to Mr. Lele, "the slab of black stone (5 feet 8 inches by 5 feet) upon which this interesting Sanskrit inscription is engraved was attached to the northern wall of the principal *miḥrāb* in the mosque with the writing turned inside." "The slab was taken out in November 1903, and is kept framed at the Mosque." On receipt of Mr. Lele's 'Summary,' I requested Mr. Marshall to send me mechanical copies of the inscription, and it is upon these copies that the subjoined remarks are based:—

The inscription consists of 82 lines in the Nāgarī alphabet. On the whole it is well preserved; but the end of ll. 70—80, the first few letters of ll. 63—68, and the first letter of some other lines are broken away.

The languages of the inscription are Sanskrit and Prākrit. There are 76 verses; the remainder is in prose.

The inscription contains the two first acts of a hitherto unknown *nāṭikā*, *i.e.*, a drama of four acts, entitled Pārijātamañjarī or Vijayaśrī (l. 4). This drama had been composed by the king's spiritual preceptor (*rājaguru*) Madana, a Gauḍa (Brāhmaṇa) and descendant of Gaṅgādhara (l. 3 f.). It was acted for the first time at the spring festival in the city of Dhārā (l. 3)—the modern Dhār.

The opening verse (1) contains the following statement:—

"On this pair of blank slabs is being written with difficulty the power—to be absorbed by the ear—of the virtues of Bhoja himself, who has become incarnate in the form of Arjuna."

Of the two slabs here mentioned, only the first is now available. The second must have borne the two remaining acts of the *nāṭikā*.

The last verse (76) on the preserved slab runs thus :—

"This panegyric (*praśasti*) was engraved by the artist (*śilpin*) Rāmadeva, the son of the excellent sculptor (*rūpakāra*) Sīhāka."

Here the inscription is called a panegyric. Hence it is very probable that it was composed and engraved in the lifetime of the prince whom it celebrates. This was Arjuna (v. 1) or Arjunavarman (l. 7 and v. 19), king of Dhārā (l. 9 and v. 6). He belonged to the Paramāra family (l. 13), and was a descendant of the emperor (*sārvabhauma*) Bhojadeva (l. 7). The poet represents him as the equal of his ancestor Bhojadeva (v. 6) and even as an incarnation of Bhoja (v. 1). In verse 3, Bhojadeva himself is compared to the god Kṛṣṇa and to the epic hero Arjuna :—

"Victorious is Kṛṣṇa; like Kṛṣṇa, Arjuna; (and) like Arjuna, the glorious king Bhojadeva, who was able to defeat (his enemies) by leaping arrows;[1] who afforded protection to the whole earth; who assumed the *rādhā*[2] which distressed (his enemies) by wounds from roaring, terrible arrows;[3] (and who) had his desires speedily fulfilled for a long time at the festive defeat of Gāṅgeya."

The last few words of this verse imply that king Bhojadeva defeated a prince named Gāṅgeya, just as the epic hero Arjuna killed Bhīṣma, whose metronymic was Gāṅgeya. As the great Paramāra king Bhojadeva of Dhārā was reigning in the first-half of the eleventh century,[4] his enemy Gāṅgeya must be identical with the Kalacuri king Gāṅgeya of Tripurī, whose reign fell into the same period.[5]

Arjunavarman, the hero of the drama, is in one place (v. 10) styled 'the son of king Subhaṭa.' This enables us to identify him with the Paramāra king Arjunavarman, who was the son of Subhaṭavarman, and whose copper-plate grants are dated in A.D. 1211, 1213 and 1215.[6] Two of the same grants prove that the new drama was composed in the reign of this Arjunavarman. For they were composed (*racita*) by the same *rājaguru* Madana,[7] who was the author of the drama (l. 4).

Arjunavarman's grants report that he defeated Jayasiṁha.[8] The same enemy is referred to in the drama (l. 7), with the additional information that he was a king of Gūrjara (l. 7, vv. 10 and 18) and belonged to the Caulukya family (v. 7). Hence he seems to be identical with the Caulukya king Bhīmadeva II. of Aṇahilapāṭaka,[9] whose grants are dated between A.D. 1199 and 1238.[10] Though these grants do not apply the name Jayasiṁha to Bhīmadeva II., they call him "the new Siddharāja" and Siddharāja had been the surname of his ancestor Jayasiṁha. Hence I believe that Bhīmadeva II. is meant in the drama and in the grants of Arjunavarman. It is, however, not absolutely impossible that the Jayasiṁha whom Arjunavarman defeated was the temporary usurper Jayantasiṁha Abhinava Siddharāja, who ruled in the place of

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1 The word *bāṇa*, 'an arrow,' may refer also to the Bāna king.

2 'A particular attitude in shooting (standing with the feet a span apart)'.—Monier Williams.

3 In the case of Kṛṣṇa we have to translate :—"Who was able to defeat the leaping (demon) Bāna; who afforded protection to all the cows (by lifting up the mountain Govardhana); who made Rādhā distressed by being smitten with manifest love." In the case of Arjuna, Rādhā is the foster-mother of his opponent Karṇa.

4 *Ep. Ind.*, Vol. I, p. 232 f.

5 *Ibid.*, Vol. II, p. 302.

6 Prof. Kielhorn's *Northern List*, Nos. 195, 197, 198.

7 *Journ. Am. Or. Soc.*, Vol. VII, pp. 29 and 33.

8 *Ibid.*, p. 26, verse 17.

9 This was already suggested by Dr. Hall, *ibid.*, p. 39f.

10 Prof. Kielhorn's *Northern List*, Nos. 188 and 216.

Bhīmadeva II. in A.D. 1223.[1] At any rate, as noted by Bühler,[2] Merutuṅga's *Prabandhacintāmaṇi* places both the conquest of Gujarāt by Arjunadeva of Mālava and an attempted invasion[3] by his father Subhaṭa in the lifetime of Bhīmadeva II. himself.

The drama locates the decisive battle between Arjunavarman and Jayasiṁha on the borders of the land at the foot of a mountain called Parvaparvata (l. 7). The name of Arjunavarman's minister is stated to have been Nārāyaṇa (v. 8). To Arjunavarman himself the drama applies the surname Trividhavīracūḍāmaṇi (l. 7 and v. 9). Even this detail is corroborated from two different sides. The same surname occurs as Trividhavīra in the grants,[4] and as Vīracūḍāmaṇi in the colophon of a commentary on the *Amaruśatakam.*[5] This commentary is attributed to king Arjunavarman, who calls himself at the beginning of it the son of king Subhaṭavarman and 'the light of Bhoja's family.'[6]

Finally the drama mentions a few localities within and near the city of Dhārā. According to the prologue, the first performance of the drama took place in a temple of the goddess Sarasvatī.[7] The scene of the first act is the top of the royal palace (v. 8), and that of the second act a pleasure-garden (*līlodyānam*) on the Dhārāgiri, a hill near the city.

The *dramatis personæ* are the stage-manager (*sūtradhāra*); the actress (*naṭī*); king Arjunavarman; the jester Vidagdha; queen Sarvakalā; her maid Kanakalekhā; the royal gardener Kusumākara; his wife Vasantalīlā; and the heroine Pārijātamañjarī or Vijayaśrī. The king and Kusumākara speak Sanskrit, the remaining persons Prākrit—Śaurasenī in the prose passages and Mahārāṣṭrī in the verses. The pretty verses of the bards, which are recited behind the stage, are also in Prākrit.

In the prologue (*vāṅmukham*, l. 15) the stage-manager informs the actress that, when the army of Jayasiṁha had fled and the victorious Arjunavarman was still seated on his war-elephant, a cluster of blossoms of a celestial tree (*pārijāta-mañjarī*) fell on his breast and, on touching it, was transformed into a beautiful maiden, while a voice from heaven spoke thus:—

"Enjoying this lovely, auspicious Vijayaśrī, thou, O lord of the earth, shalt become equal to Bhojadeva" (v. 6).

The stage-manager further explains this miracle in a somewhat difficult verse (7), which has probably to be translated as follows:—

"The daughter of the king of the Caulukya country, (who was an incarnation of) Jayaśrī (*i.e.*, the goddess of victory) herself, who, having found her death in the defeat, watered the young forest of *tamâla*-trees, which was the grief of her father, with the copious streams of the tears of the harem,—she, having entered a sprout with a cluster of blossoms of the celestial tree, was changed into this lady."

To shelter her from the public gaze, the king placed her under the care of his gardener Kusumākara, whose wife, Vasantalīlā, waited on her in an emerald-pavilion on the Dhārāgiri hill.

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1 Prof. Kielhorn's *Northern List*, No. 205.
2 *Ind. Ant.*, Vol. VI, p. 187.
3 This invasion is alluded to in the grants of Arjunavarman; *Journ. Am. Or. Soc.*, Vol. VII, p. 26, verse 15.
4 *Loc. cit.*, verse 19.
5 Kāvyamālā edition, p. 69.
6 *Ibid.*, p. 1, verse 5.
7 Śāradādevī, l. 3, or Bhāratī, l. 6.

The first act bears the title 'the spring-festival' (*vasantotsava*, l. 31). It describes the king viewing his sporting subjects from the top of his palace in the company of the jester, the queen and her maid.

In the introductory scene (*viṣkambhaka*, l. 39) of the second act Kusumākara and Vasantalīlā compare notes on the mutual passion of the heroine and the king.

The title of the second act is 'the reflecting ear-ring' (*tāḍaṅkadarpaṇa*, l. 82). The king, accompanied by the jester, repairs to the pleasure-garden, in order to witness a ceremony performed by the queen—the marriage of a mango-tree to a spring-creeper. Vasantalīlā and the heroine watch the proceedings from behind a tree. Bending aside the branches, the former reveals to the king the image of his beloved reflected in the queen's ear-ring. The king's delight and confusion arouse the suspicions of the queen, who leaves abruptly together with her maid. The heroine and Vasantalīlā also withdraw. At the advice of the jester, who reminds the king of the proverb that 'killed and eaten comes to the same' (l. 59), both follow them to the emerald-pavilion. The king's *tête-à-tête* is interrupted by the appearance of Kanakalekhā, who is the bearer of the ear-jewel and of an angry message from the queen. The king tries in vain to hide Pārijātamañjarī behind his back. At the end he leaves her in order to pacify the jealous queen. The heroine also departs, threatening to commit suicide, and Vasantalīlā follows her.

The foregoing summary of the two preserved acts will remind the reader of another well-known drama, the *Ratnāvalī*. The poet Madana no doubt derived the plot of his work from this or similar *nāṭikās*. But, as the hero of the new drama was a living and reigning king, it is unlikely that the chief persons who appear on the stage together with him were pure inventions of the poet. It would have been a poor panegyric which made Arjunavarman move among fictitious characters. Hence I believe that, as stated in the drama, his chief queen was actually named Sarvakalā and was the daughter of the king of Kuntala (v. 11), who is perhaps identical with the Hoysaḷa king Vīra-Ballāḷa II,[1] and that Pārijātamañjarī or Vijayaśrī happened to be Arjunavarman's favourite when the drama was composed. Her miraculous appearance and her fanciful connection with the vanquished king of Gujarāt may have been suggested to the poet by her real name. They could not fail to please the king and his mistress, and could perhaps be risked all the more easily because the lady was not of royal blood, but owed her elevation only to her personal charms.

Another instance in which the marriage of the favourite queen of a reigning sovereign forms the subject of a romantic story is that of Candaladevī in the *Vikramāṅkadevacaritam*.[2] In this case contemporary inscriptions and Kalhaṇa's *Rājataraṅgiṇī* prove that the heroine's name was not invented by the poet Bilhaṇa, but that she was actually one of the wives of Vikramāditya VI.[3] Vidyānātha's *Pratāparudrīyam* deserves to be mentioned in the same connection, as it includes a drama which resembles the *Pārijātamañjarī* in being the panegyric of a reigning king.[4]

E. HULTZSCH.

[1] See the Table of the Hoysaḷas in Dr. Fleet's *Dynasties*, p. 493.
[2] Bühler's edition, p. 38 ff. of the Introduction.
[3] Dr. Fleet's *Dynasties*, p. 449 and note 4.
[4] Compare *Ind. Ant.*, Vol. XXI, p. 198 f.

INSCRIBED GANDHĀRA SCULPTURES.

No.	Inscribed object.	Find-place.	Place of custody.	Reference.
1	Base of a pilaster (fragment; ht. 8 cm.).	Jamālgaṛhī .	Unknown . .	Cunningham, *A. S. R.*, Vol. V, p. 63; Pl. XVI, fig. 7. *Cf.* Bloch, *List of Negatives, Indian Museum*, No. 997.
2	Halo of a Bodhisattva (?) head.	" . .	" . .	Cunningham, *ibidem*, fig. 8. Senart, *J. A.*, series 8, Vol. XV (1890), p. 132.
3	Halo of a Buddha image (fragment; ht. 1·20 m.).	Unknown . .	Central Museum, Lahore (No. 255).	......
4	Bas-relief, representing the visit to the writing-school (fragment; ht. 15 cm.).	" . .	Central Museum, Lahore (No. 206).	Boyer, *B. E. F. E. O.*, Vol. IV (1904), p. 685 *sqq.*
5	Pedestal of a Bodhisattva (?) image (fragment; ht. 15·5 cm.).	" . .	Central Museum, Lahore (No. 679).	Burgess, *J. I. A. I.*, Vol. VIII, No. 62 (April 1898), Pl. XIII, fig. 4.
6	Pedestal of a Buddha (?) statue, "the Chārsada pedestal," excavated by Lieut. M. Martin in 1882 (fragment; ht. 22·2 cm.).	Shahr-i-nāpursān between Rājaṛ and Utmanzai (Hashtnagar).	Central Museum, Lahore (No. 1194).	Bühler, *Anz. Ak. Wiss. Wien, Phil. hist., Cl.* XXXIII, p. 64 *sqq.* (with plate) and *Ind. Ant.*, Vol. XXV (1896), p. 311 *sqq.*
7	Pedestal of a Buddha (?) statue, "the Hashtnagar pedestal," obtained by Mr. L. White King about 1883.	Pālāṭū Ḍherī, near Rājaṛ.	British Museum, London.	V. A. Smith, *J. A. S. B.*, Vol. LVIII (1889), p. 144 *sqq.* (with plate), and *Ind. Ant.*, Vol. XVIII (1889), p. 257 *sq.* (with facsimile) and Vol. XXI (1892), p. 166 *sq.* Bühler, *Ind. Ant.*, Vol. XX (1891), p. 394. Senart *J. A.*, series 8, Vol. XV (1890), p. 124 *sq.* and series 9, Vol. XIII (1899), p. 530 *sq.* Burgess, *J. I. A. I.*, Vol. VIII, No. 62 (April 1898), p. 28, Pl. V, fig. 3 and No. 69 (January 1900), p. 89.

No.	Inscribed object.	Find-place.	Place of custody.	Reference.
8	Pedestal of a Buddha statue (head missing; ht. 1·625 m.), excavated by Mr. A. E. Caddy in 1896.	Loriyān Tangai (Svāt).	Indian Museum, Calcutta (No. 4901).	Senart, *J. A.*, series 9, Vol. XIII (1899), p. 526. Burgess, *J. I. A. I.*, Vol. VIII, No. 69 (January 1900), p. 89. *Cf. Proc. A.S.B.*, 1898, p. 60 and Bloch, *List of Negatives, Indian Museum*, Nos. 1035 and 1042.
9	Image of a Buddha seated in meditation (ht. 49·5 cm.), obtained by Mr. Caddy in 1896.	Loriyān Tangai (Svāt).	Indian Museum, Calcutta (No. 4871).	......
10	Bas-relief, representing a Buddha between attendant Bodhisattvas (fragment; ht. 21·5 cm.), obtained by Mr. Caddy in 1896.	Loriyān Tangai (Svāt).	Indian Museum, Calcutta (No. 5095).	....
11	Image of a Bodhisattva (Padmapāṇi?) holding a lotus (head broken; ht. 66 cm.), obtained by Mr. Caddy in 1896.	Loriyān Tangai (Svāt).	Indian Museum, Calcutta (No. 4995).	......
12	Image of Hāritī, (ht. 1·35 m.), discovered by villagers in 1901.	Skārah Ḍherī near Spinvaṛī 8⅓ m. north of Chārsada (Hashtnagar).	Central Museum, Lahore (No. 1625).	Stratton, *J. A. O. S.*, Vol. XXIV (1903), p. 1 *sqq.* (with plate and facsimile) Boyer, B. E. F. E. O., Vol. IV (1904), p. 680 *sqq.*
13	Pedestal of a Buddha (?) statue (fragment; ht. 22 cm.) excavated in April 1903.	Pālātū Ḍherī, near Rājaṛ.	Destined for Peshāvar Museum.	*A. S. R.*, 1902-03, p. 167.
14	Pedestal of a Bodhisattva statue (fragment; ht. 95·4 cm.), excavated in April 1903.	Ghaz Ḍherī near Rājaṛ.	Ditto . .	*A. S. R.*, 1902-03, p. 176.

The foregoing is a full list of the inscribed Gandhāra sculptures, which are now known to us. Their number is very limited, when compared to the mass of sculptural remains which the Gandhāra country has yielded during more than half a century. Moreover, several of the inscriptions are far from complete and some so much injured that it was only for completeness' sake that I deemed it advisable to add them to the list.

The inscription on No. 4 (Plate LXVI, fig. 1) is of a very exceptional kind; it has a direct bearing on the subject of the sculpture. This is an event of Gautama Buddha's childhood, his visit to the writing-school (*lipiśalā-saṁdarśana*), described in the

Lalitavistara.[1] It is related how on that occasion the future Buddha excited the amazement of the school-master Viśvamitra by showing himself familiar with sixty-four different scripts: Brāhmī, Kharoṣṭhī, etc., of most of which the preceptor had not even heard the name. Moreover, in his mouth every letter of the alphabet became the initial of a moral sentence: *e.g.*, the letter *ā* was continued so as to form *ātma-parahitam* "the welfare of one's self and others."

On the fragment in the Lahore Museum we find a sitting figure, holding on its knees a writing-table (*lipiphalaka*). His dress marks him as the Bodhisattva. The absence of a halo does not stand against this identification; nor does his appearance, which is rather that of a grown-up person than of a school-boy. We may refer to one of the reliefs of the *stūpa* of Sikri, where even at an earlier stage of his existence

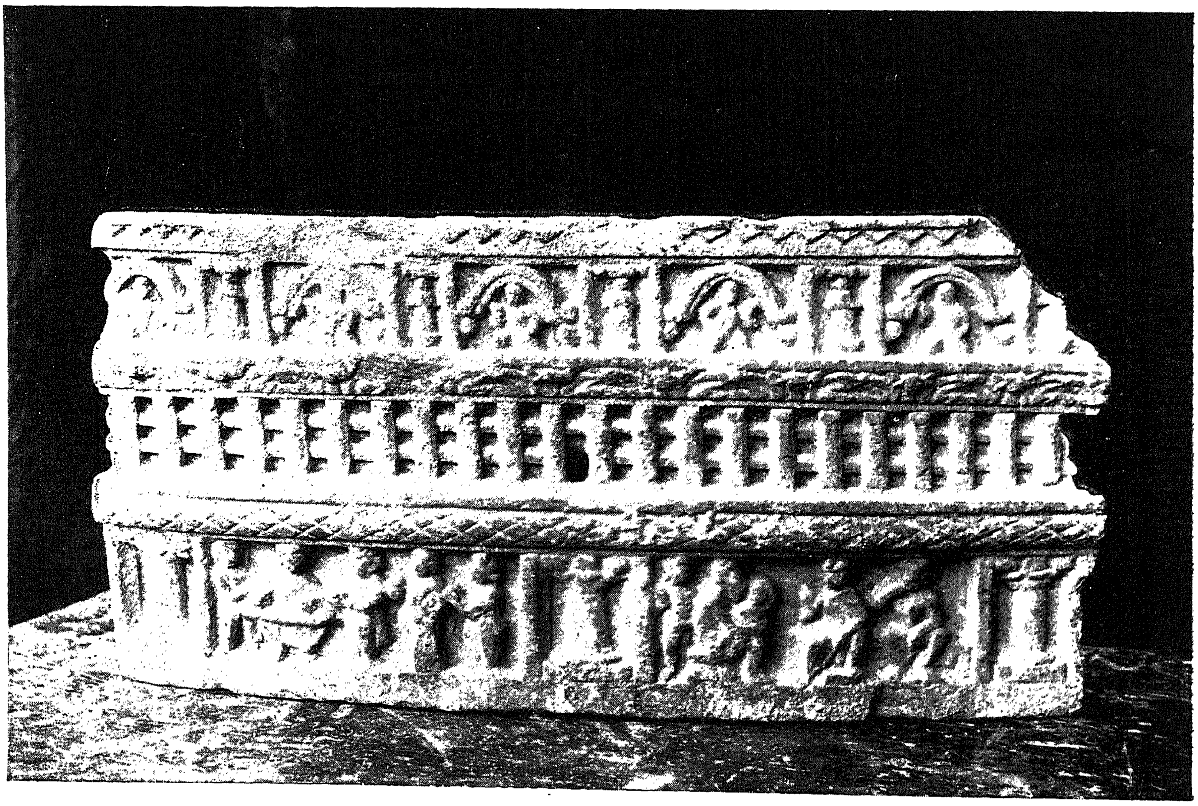


Fig. 1.

he is portrayed as a man and not as a child.[2] The use of the halo is too irregular in the Gandhāra school to render its absence a decisive criterion. Anyhow, the ingenious remarks made by M. A. M. Boyer with regard to this sculpture can hardly leave any doubt about the correctness of the proposed identification. On the writing-table, resting on Siddhārtha's knees, that author notices five Kharoṣṭhī letters (not more than ·7 cm. in size), which can be read *sa pa ra ṇa ta*. But the Bodhisattva's hands, which are placed on it, may be supposed to cover part of the inscription, so that we can either read *saparaṇa*[*ṁ*] [*hi*]*ta* (Skr. *svaparahitaṁ*) or,

[1] *Lalit.* (ed. Lefmann), Halle, 1902, Vol. I, p. 123 *sqq.* The legend has been compared with that of Jesus' school attendance, preserved in the apocryphal gospel of St. Thomas.

[2] *Cf.* Foucher, *Les bas-reliefs du stūpa de Sikri*, *J. A.*, September—October 1903, p. 279.

1


2


3


4


according to the conjecture of M. Foucher, [*ata*]*sa parana* [*hi*]*ta* (Skr. *ātmanah pareṣāṁ hitaṁ*). In both cases we obtain a legend corresponding exactly in meaning and nearly in form with the above-quoted sentence of the Lalitavistara.

I noticed the same subject on one of the fragments of the sculptured facing of a miniature *stūpa* drum from Sikri, now in the Lahore Museum (No. 1289; ht. 21 cm.; see fig. 1). It contains two panels. That to the proper right represents the visit of Asitadevala, which is conclusive proof that the proposed identification is correct. It should be remembered that the scenes succeed each other in the order of the *pradakṣiṇā*. The visit to the writing-school is also found on the Bōrōbudur.[1]

Of the thirteen remaining epigraphs eleven are votive inscriptions. The same may be surmised with regard to Nos. 5 and 14, which are almost entirely destroyed. In six cases we find it clearly indicated by the word *dānamukhe*, the usual term in the North-West to indicate a pious gift.[2] In No. 8 also, where M. Senart reads *dānam*, I propose to substitute *dānamukhe*. The missing portion of No. 3 presumably contained the same word of which the first syllable is preserved. Mostly the inscriptions record the name of the donor or donors. Only in one case (No. 1) the name of the object is mentioned. Nos. 6, 7 and 12 are dated, and, on that account, possess a special interest for the chronology of the Gandhāra school of sculpture. With two exceptions the inscribed object is an image either of a Buddha or a Bodhisattva. The last point cannot be decided on in the case of the pedestals Nos. 5, 7 and 13, where only the feet of the image remain. It is the general rule that Buddha statues in monk's dress are barefooted, whereas Bodhisattvas in royal attire wear sandals.[3] There are, however, instances of the latter also represented with bare feet, so that the criterion cannot be said to be absolutely reliable. In Nos. 2 and 3 the inscription is cut on the halo of the image, but the other Buddha and Bodhisattva statues have it invariably on the front of their pedestals. On the Hāritī image (No. 12) the lines are incised vertically on the flat surface of the stone to the proper left of the image. Only in one case (No. 1) the inscribed object is not an image, but the base of a pilaster.

It is noteworthy that no less than five of our inscribed sculptures were discovered at or near the site of Puṣkalāvatī on the Lower Svāt, not far from its junction with the Kābul. Four originate from the Upper Svāt valley, two from Jamālgaṛhī, and of the others the find-spot is unknown. Parenthetically, I may notice that the form Jamālgaṛhī, which has now been universally adopted (in older writings we sometimes find Jamālgiri), does not represent the local designation of the place, which in Pukhto is Jamālgaṛai. Likewise Hindī *ḍherī* becomes *ḍerai* in that language,[4] and it would, therefore, be more correct to speak of "Skāro Ḍerai" (*i.e.*, "Charcoal mound;" Pukhto *skārah*=charcoal), instead of "Skārah Ḍherī" which is half Pukhto and half Hindī. Rājaṛ is commonly pronounced Razaṛ by the Paṭhāns, but I feel inclined to regard the former as the more original and correct form, possibly derived from an ancient Rājapura or Rājagṛha.[5]

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[1] C. M. Pleyte, *Die Buddha-legende in den Skulpturen des Tempels von Bōrō-budur*, Amsterdam, 1901, p. 60, figs. 37 and 38.

[2] *Cf.* Senart, *J. A.*, series 8, Vol. XV (1890), p. 132 *sqq.*, and Bühler, *Ind. Ant.*, XXV (1896), p. 311, footnote 3.

[3] *Cf.* Grünwedel-Burgess, *Buddhist Art in India* (London, 1901), p. 182.

[4] *Cf.* Darmesteter, *Chants populaires des Afghans*, pp. XIII and XIV.

[5] *Cf.* Rājaurī from Rājapurī. *Rājataraṅgiṇī* (transl. Stein), p. 433.

The fourteen inscribed sculptures are scattered among four different museums, which circumstance adds to the difficulty of their study. By the efforts of various scholars in Europe and India the reading of the majority of them can be said to be settled. Less certain in some cases is their interpretation. The present note, in summing up the results hitherto obtained, will, it is hoped, assist in reducing the existing difficulties. In a few cases corrections or completions will be proposed. I have added reproductions of most of the sculptures and inscriptions in question, including those which have been reproduced elsewhere, in order to facilitate a comparison of style and script.

Nos. 1 and 2 of our list are not traceable in any museum. They were perhaps among the sculptures which were lost in the steamer "Indus" off Ceylon in November 1885. Of the inscriptions on both we possess the facsimiles of Sir A. Cunningham. No. 1, moreover, occurs, together with other sculptures now in the Calcutta Museum, on a photograph, which shows Cunningham's facsimile to be fairly accurate.[1] By a comparison with some of these sculptures, of which Dr. Bloch has given me the measurements, the height and breadth of the inscribed fragment can be calculated at nearly 8 cm. The size of the letters must have been 1·3 to 2 cm. It was evidently the proper left portion of the base of a pilaster and, judging from its height, the missing part may have been about equal in breadth. The first line of the inscription may, therefore, originally have contained double the number of *akṣaras* which have been preserved. The second line contains the concluding portion of the epigraph, *viz.*, four *akṣaras* of which the second is injured.

No. 1 was read by Sir A. Cunningham :

1. *Budhavara masa ce*[*tra* *]

2. *E* * *thuna*

"On Wednesday, in the month of Caitra."

From the facsimile and the photograph it appears that the fourth letter has a loop to the left of the foot of the vertical stroke, which in the Kharoṣṭhī of the Kuṣaṇa period indicates the vowel *u*. We have therefore to read *ru*. For the second letter of the second line either *ta* or *ka* can be substituted. The facsimile favours the reading *ka*, so that the legend will be :

1. *Buddhavarumasa ce* . . . . .

2. *e*[*ka*] *thuna*

or rendered in Sanskrit :

Buddhavarmaṇas ce . . . *ekā sthūṇā*

"[The gift] of Buddhavaruma (Skr. Buddhavarman) *ce* (?) . . . a pillar (or pilaster)."

We may assume that the pilaster to which our fragment belonged, was provided with one of those elaborately decorated Indo-Corinthian capitals, of which several specimens have been found among the ruins of Jamālgaṛhī.[2]

No. 2 was read by Cunningham :

Saphae danamukha and corrected by M. Senart : *Saphala danamukha*, meaning "A profitable gift." The original being lost, our only basis is the facsimile given by Cunningham. M. Senart is undoubtedly right in making the third letter an *l*. That the

[1] The reproduction of the photograph given on Plate LXX, fig. 1, has by an oversight been reduced to so small a scale as to make it useless for reference.

[2] *Cf.* V. A. Smith. *J. A. S. B.*, Vol. LVIII (1890), p. 116 *sqq.*, and Grünwedel-Burgess, *op. cit.* p. 152 *sqq.*

vertical stroke does not extend beyond its junction with the curve to the left may be a defect in the tracing. On the other hand the *e*-stroke to the right is very distinct, and I should therefore prefer to read *saphale*. The nominative ending in *e* is frequently found in Gandhāra epigraphs. That it is not apparent in the second word may simply be another defect in the tracing. It is noteworthy that, whereas the Gandhāra inscriptions have the nominative in *e*, we find *danamukho* in the Fatḥ Jang and Shakardarra epigraphs, both of which originate from the Rāval Piṇḍi district.[1]

The inscription on No. 3 (Plate LXVI, fig. 2) has hitherto remained unpublished. I read it: *Bosavarumasa da[namukhe*]*, "The gift (?) of Bosavaruma." Of that on No. 4 (Plates LXV, fig. 4 and LXX, fig. 3) only the initial and part of the second letter are preserved which I read *Saṁhe* . . . The epigraph cannot have been very long, as the surface of the stone is destroyed only over a distance of 7 cm. and consequently only ten *akṣaras* at the utmost are lost, the space required for one *akṣara* being about ·7 cm. Probably it consisted, like No. 10, of a proper name in the genitive case and the word *dānamukhe*.

Of more importance is No. 5 (Plate LXVII, fig. 1), the Chārsada pedestal of the Lahore Museum. In reality the sculpture was not found "in the Chārsada mound," but in or near that of Mīr Ziyārat on the site of Shahr-i-nāpursān. The breadth of the three facets, in which the front is divided, is 7, 25·5 and 6·5 cm., respectively, from the proper right to the proper left, making altogether 39 cm. The height of the pedestal proper is 22·2 cm. Dr. Bühler, in describing the alto-relievo, says that it contains five male figures, of which the four standing "are easily recognized as Buddhist monks by their shaven head and arrangement of the dress which leaves the right arm free." It is true that the appearance of the four figures is the same, but it will be noticed that the outline of the two which are standing to the left of the central figure seems to indicate female rather than male persons. They have both shoulders covered and seem to wear a necklace. I am, therefore, inclined to see in those two *bhikṣuṇīs* instead of *bhikṣus*, just as on other pedestals we find the central figure placed between *upāsakas* and *upāsikās*. That the seated person represents a Bodhisattva is evident from his dress and ornaments. His right hand is raised in *abhayamudrā*, expressing "absence of danger" or protection to those who approach him. The other hand is unfortunately broken, but from the fracture it seems probable that it held the ointment vessel, the characteristic attribute of Maitreya, the future Buddha.

The inscription (Plate LXX, fig. 4) was read by Dr. Bühler, *Arog* . . . . *Saṁghamitrasa Ṣam* (?) . . . *sa danamukhe Budho tu* . *sa* . . *Arog* . . *me* . . . "A Buddha, the excellent gift of Saṁghamitra Śam . . . [May I obtain] health."

With reference to this reading, the following points are to be noted. It will be seen, that the first and the fifth *akṣara*, following the gap after the initial *aroga*, present almost exactly the same appearance, *viz.*, to the foot of the sign for *s* a sharp curve open to the left is attached. In the first instance Bühler reads *saṁ*, which undoubtedly is correct. But in the second case the character cannot have the same value. The curve is too pronounced to be meaningless, and I, therefore, propose to read *sya*. There are instances of this group of consonants being expressed in a

[1] The Fatḥ Jang inscription was edited by M. Senart, *J. A.* Series 8, Vol. XV (1890), p. 129 *sqq.*, that of Shakardarra by Dr. Bühler, *Anz. Ak. Wiss. Wien, Phil. hist*, Cl. XXV (1898), p. 12 *sqq.*

similar manner.[1] The only objection would be that in the immediately following word we find a genitive ending in *sa*. The letter which stands between *ma* and *sa*, though slightly injured, can be plainly discerned on the original as *ṇa*. The *akṣara* after *budho*, if compared with the sign for *ro*, will be found to be *ru* and not *tu* as proposed by Bühler. The next one is certainly *ma*. The remaining part of the inscription is engraved on the base of the dwarf pilaster which encloses the relief to the proper right. The first three *akṣaras* are *aroga*, but the rest is considerably injured. The letter *d* can still be traced after *ga*. Dr. H. Lüders, to whom I sent impressions of the inscription and who agreed with the above reading, suggested that the missing letters at the end may have been *chinae*.[2] So we arrive at the following reading:

Aroga . . . . . Saṁghamitrasya ṣamanasa danamukhe Budhorumasa arogadachinae;

or in Sanskrit:

Aroga . . . . . Saṁghamitrasya śramaṇasya dānamukhaṁ Buddhavarmaṇa arogadakṣiṇāyaī:

"The gift of the mendicant Saṁghamitra for the gift of health to Budhoruma (Skr. Buddhavarman)."

As the open space between *ga* and *saṁ* measures 8 cm. and one *akṣara* takes up 1 to 2 cm., it is probable that some 5 or 6 syllables are lost.

The inscription on No. 7, the well-known Hashtnagar pedestal, was first read by Cunningham:

Saṁ 274 emborasmasa masasa me pañcamī 5.

"In the year 274 on the fifth day of the intercalary month."

This reading, however, was abandoned after Dr. Bühler and M. Senart had independently arrived at a nearly identical conclusion, essentially differing from that of Cunningham. Dr. Bühler read:

Saṁ, II C XX XX XX X IV Postavadasa masasa dī[va]saṁmi paṁ[ca]mī 5 [||*]

or in Sanskrit

Saṁ 274 Prauṣṭhapadasya māsasya divase pañcame 5 [||*]

"The year 274, on the fifth (5) day of the month of Prauṣṭhapada (*i.e.*, Bhādrapada or August — September)."

M. Senart, who first felt some doubts regarding the figure of the hundreds, arrived finally at the following result:

Saṁ 384 Proṭhavadasa masasa dī[vase] pa[ṁ]came 4, 1.

The main difference from Dr. Bühler's reading concerns the figure for the hundreds, in which M. Senart is undoubtedly correct. The first syllable following the figures has certainly the *r* stroke to the proper left and the next one is clearly *ṭha*, the regular Prākrit equivalent of Sanskrit *ṣṭha*.[3]

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[1] *Cf.* Bühler. *Indische Palæographie*, Tafel I, fig. XII, 36.

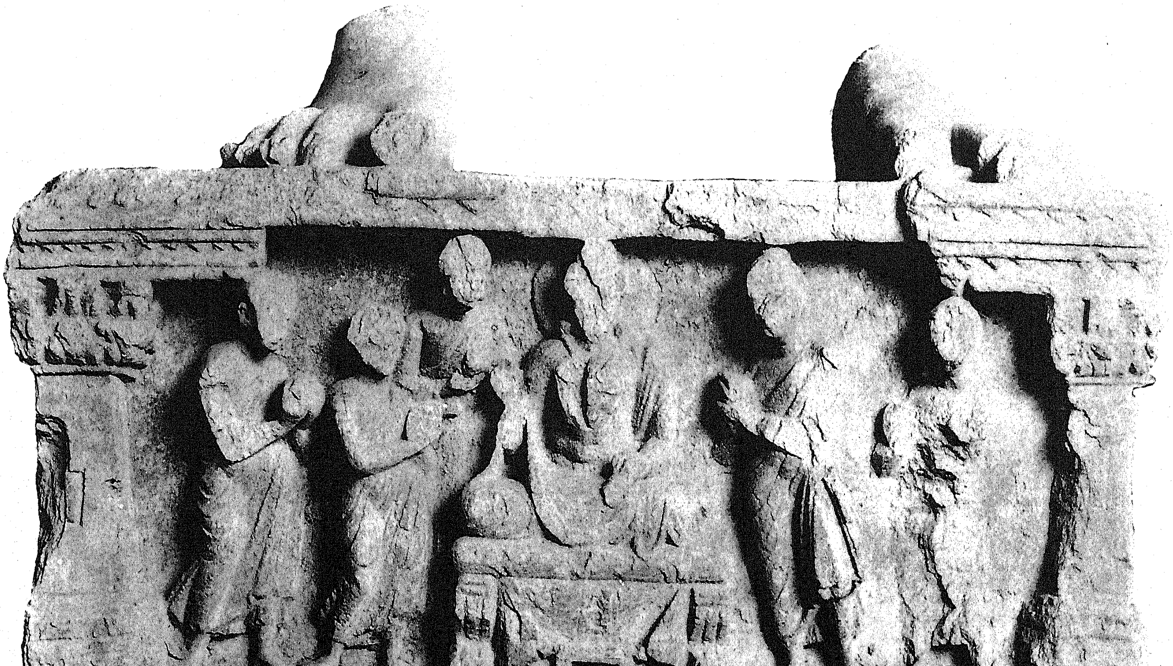
[2] On again examining the stone, I find evident traces of the syllable *chi* also, which confirms the above conjecture. Dr. Lüders compares *sarvasatvana arogadachinae bhavatu* on the Wardak vase and *sarvveṣaṁ prahaṇikānaṁ arogga-dakṣiṇāye bhavatu* in a Mathurā inscription, *Ind. Ant.*, Vol. VI, p. 218, No. 3. The word *arogadachiṇā* occurs also on a fragmentary Kharoṣṭhī inscription from Naugrām, now in the Lahore Museum (I. 154).

[3] On the Takṣaśilā vase (Lahore Museum), however, we find *tha* in *pratithavito*=Skr. *pratiṣṭhāpitaḥ*.

1



2



The form *Proṭhavadasa* recurs on No. 8, and is also found in the inscription from S̲hakardarra in the Lahore Museum (I, 142). In that form Fatḥ Jang in the same museum (I, 3) the fourth syllable seems to be *ṭa* instead of *da*.[1] In the second ha f of the epigraph I prefer to read with Dr. Bühler *divasaṁmi paṁcami*. It will be seen that the vertical strokes of some of the *akṣaras* are continued beneath the raised border on which the inscription is cut. This is the reason why on the rubbing published by Mr. V. A. Smith the curves at the foot of *sa* and *pa*, which, as stated above, indicate *anusvāra*, are not visible. The concluding portion of the inscription, which may have consisted of some eight *akṣaras*, is lost. It probably contained the name of the donor in the genitive case with the word *danamukhe*. The final reading, therefore, will be:

Saṁ 384 Proṭhavadasa masasa divasaṁmi paṁcami 5 . . . .

"In the year 384, on the fifth, 5, day of the month Proṭhavada (Skr. Prauṣṭhapada). . . . . ."

No. 8 is a nearly life-size statue of a standing Buddha (Plate LXIX, fig. 2) of which the head is lost. Its height, including the pedestal, is 1·625 m., its greatest breadth 61 cm. The image proper is much injured. The left foot and the two hands, of which the right one was evidently raised in the *abhayamudrā*, are broken off. The relief on the pedestal, on the contrary, is very well preserved. It is surmounted by a conventional leaf border and enclosed between the usual Indo-Corinthian pilasters. Its centre is occupied by a seated Bodhisattva whom the vessel in his left hand characterizes as Maitreya. The other hand is in the *abhayamudrā*. To his left are two male, to his right two female devotees standing.

The inscription (Plate LXX, fig. 5) is incised not on the raised border beneath the relief, as in the foregoing instances, but on the plain surface between that border and the tenon of the pedestal. The inscribed area measures 42 cm. by 14 cm. The size of the letters varies from 2 to 4 cm. The inscription has been deciphered by M. Senart:

1. *Sa 318 (III C. 10-4-4) Proṭhavadasa di 27 (20-4-3) Buddhaghoṣasa danam*
2. *Sa[ṁ]gharamasa sadarabhatisa*

"The year 318, the 27th of Prauṣṭhapada, gift of [this] monastery by Buddhaghoṣa with his wife and brother."

M. Senart remarks that the words *danam* and *saṁgharamasa* are far from certain. The third *akṣara* presents the appearance of a form derived from the sign for *m*. It must, however, be admitted that neither final *m* nor *anusvāra* are ever expressed in a similar manner. The syllable *mu*, on the other hand, is in the Kharoṣṭhī of the Kuṣaṇa period rendered by a series of varying characters to which that of our epigraph bears a close resemblance.[2] This interpretation seems the more plausible, as after the letter in question on the very edge of the stone I distinguish another character which seems to be *khe*. This letter, which is not visible on M. Senart's facsimile, can be plainly traced on the impressions with which Dr. Bloch has supplied me.[3] The *akṣara*, it is true, is incomplete, but this can be easily

[1] *Cf.* above, p. 249, foot-note.

[2] See, for example, the last but one *aksara* of the S̲hakardarra inscription, referred to above.

[3] Dr. Bloch, who, at my request, examined the original, writes me: "The last word in the first line of the Lorayān Tangai image inscription is undoubtedly *danamukh* [*e*]. There are distinct traces of the *kha* after *mu*, but the edge of the stone is somewhat broken. I am perfectly certain in regard to this reading and restoration."

explained. We may assume that the engraver had not measured out the available space with sufficient care. The inscription, it will be noticed, is decidedly inferior in execution, when compared to the neatly incised epigraphs on the pedestals of Hashtnagar.

As to the word *saṁgharamasa*, we are certainly justified in supplying the *anusvāra* which is often omitted in Kharoṣṭhī. I need only refer to the initial *akṣara* of the epigraph under discussion. But M. Senart observes that, leaving the interpretation aside, the word would be *saṁghorumasa*, and this is fully confirmed by the impressions at my disposal. There can, in my opinion, be no doubt that the second and third letters are really provided with a vowel stroke, respectively indicating *o* and *u*. If we compare the word *saṁghorumasa* with *Budhorumasa* (No. 6), *Budhavarumasa* (No. 1), and *Bosavarumasa* (No. 2), there can be little doubt that, like these three, it is a proper name in the genitive case, the second member of which corresponds to Skr. *varman*. It is true that in the dramatical Prākrits, as well as in Pāli, *varman* becomes *vammo*,[1] but this does not preclude the possibility of a form *varuma* in a dialect spoken on the North-West Frontier of India. That Gāndhāri must have differed in essential points from the literary Prākrits is sufficiently illustrated by forms like *ṣamanasa*. On the other hand, it should be remembered that the insertion of a *svarabhakti* vowel *u* between two consonants is by no means uncommon in Prākrit.[2] Considering that Sanskrit *ava-* becomes regularly in Prākrit *o*—and no doubt also in Gāndhārī, as we may infer from the Greek rendering Peukelaotis of the name Puṣkalāvatī—we are justified in regarding *budhavaruma* and *budhoruma* as different forms of the same word, and in deriving *saṁghoruma* from an older **saṁghavaruma* corresponding with a Skr. *saṅghavarman*. It would perhaps be going too far to deduce from these grammatical forms any conclusions as to the relative age of the sculptures on which they occur. It is possible that older and later forms are found side by side, especially in proper names. Compare Kṛṣṇa, Kisaṇ and Kaṇhiyā.

I must confess that, with regard to the concluding word of the epigraph, I have some doubts as to the correctness of the reading proposed by M. Senart. The first two *akṣaras* are certainly *sa* and *da*, the *s* has seemingly the closed shape of the Maurya period, which, however, is only due to a rent in the stone. The third letter is unfortunately slightly injured near the top which makes it difficult to decide on its exact value. But there are traces of two short strokes connected with the horizontal top line, much in the same way as with the last but one *akṣara* of the inscription. Both signs, I believe, must express the same consonant, namely *r*, but in the second case combined with *i*. Whether in the first instance the vowel-stroke traversed or only touched the horizontal line, or whether, with other words, it should be read *i* or *e*, can not be decided. The fourth *akṣara* I read *śa*. Unfortunately the proposed alterations by no means render the word more intelligible. It presents the appearance of a compound noun, the last member of which seems to be the word *iśari* (Skr. *īśvarī*). Professor Kern, who agrees with my interpretation of *saṁghorumasa*, suggests reading the first syllable of the concluding word *suṁ*. We may assume that here also the

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[1] Vararuci IV, 18 in Lassen. *Instit. Pracrit*, p. 91 and Pischel *Grammatik der Prakrit Sprachen*, p. 198.
[2] *Cf.* Pāli *kudumala, atuma, idhuma, paduma, pāpunāti*, etc.

anusvāra has not been indicated and at the foot of the vertical stroke of *sa* there is a slight depression which may be a trace of the vowel-sign *u*. But, as Prof. Kern remarks, the word *īśarī* can hardly have a genitive ending in *sa*.

My reading will, therefore, be :—

1. *Sa[ṁ] 318 Proṭhavadasa di 27 Budhaghoṣasa danamukhe*
2. *Sa[ṁ]ghorumasa sadareśarisa*

"The year 318, the 27th day of Proṭhavada (Skr. Prauṣṭhapada) the gift of Budhaghoṣa [and] of Saṁghoruma (Skr. Saṅghavarman) . . . ."

Nos. 9, 10 and 11 belong to the collection of sculptures which Mr. Caddy obtained in 1896, mostly from the Svāt valley.[1] The inscriptions are published here for the first time. No. 11 is a nicely carved and well-preserved statuette of a Buddha (Plate LXVIII, fig. 1), seated cross-legged on an ornamental stool. The attitude of the hands resting in the lap expresses meditation. The robe covers both shoulders and most of the feet. In purely Indian art we find the feet with the soles turned upward uncovered. The Hellenistic sculptors of Gandhāra concealed this canonical, but unpleasing, feature with the same skill with which they converted the ugly protuberance of the scull into a graceful chignon. It should, however, be noticed that this practice is not universal in Gandhāra art, being restricted to the better and probably older specimens. Our sculpture, in which a portion of the left foot is visible, thus forms a transition between the two.[2] It is interesting to note that the foliage round the halo is that of the banyan tree (ficus indica) and not that of the *pīpal* (ficus religiosa).

The epigraph (Plate LXX, fig. 8) is incised on the cloth hanging down from the Buddha's seat and consists of two lines, 11·5 and 12·5 cm. long, which follow the folds of the drapery. The middle portion of the second line is indistinct. The size of the letters is from 1 to 2 cm. The following is my reading of the inscription:

1. *Budhamitrasa Budharachida*
2. *sa sada[resari]sa danamukhe*

"The gift of Budhamitra (Skr. Buddhamitra) [and] of Budharachida (Skr. Buddharakṣita) . . . ."

The reading *sadaresarisa* is conjectural, some of the letters being illegible. The two last letters of the second line are likewise indistinct, but there can be little doubt that there, as in nearly all these epigraphs, the concluding word is *danamukhe*.

No. 9 is a fragment of a bas-relief (Plate LXVIII, fig. 2.) The proper right side with part of the inscription is missing, and the remaining portion is considerably injured. The subject is a Buddha in the act of preaching the law (*dharmacakra-mudrā*) seated cross-legged on a full-blown lotus which rises from the waves. Over his head are traces of garlands and foliage. It is noticeable that the figure is surrounded by two haloes which are found also in later Buddhist art. As usual, the Buddha was flanked by two Bodhisattvas, but only one of these is partially preserved. We notice,

[1] Mr. Caddy writes in his report on the Loriyān Tangai excavation: "It is not a little interesting that the excavations should have yielded some four inscriptions—each, I believe, dedicatory of the statue on which it was found, generally on the pedestals or bases, in one instance on the throne draperies." As the Calcutta Museum contains no inscribed Gandhāra sculptures besides our Nos. 8-11, these may be safely identified with those referred to by Mr. Caddy.

[2] *Cf.* Grünwedel-Burgess, *op. cit.*, figs. 110, 112 and 119 for the former, and figs. 121, 137, 140 and 147 for the later procedure.

moreover, the figurine of a Nāga issuing half-way from the waters to the left of the Buddha's lotus-seat. The corresponding figure on the other side can still be traced The Nāga holds in his left hand an oar-like staff, in his right the head of the snake which hangs over his shoulder and must be supposed to issue from his back. This we may infer from another sculpture [1] in the Calcutta Museum originating from Loriyān Tangai.

What remains of the inscription (Plate LXX, fig 6) is 17·5 cm long, the average size of the letters is 1·5 cm. I read it:

S[im]hamitrasa danamukhe Sahilaasa sadare[śarisa?]

"The gift of Simhamitra [and] of Sahilaa (Skr. Sāhilaka)

It will be seen that the lower edge of the stone is somewhat damaged in the centre, which makes it uncertain how some of the consonants were originally finished at the bottom. Thus it is possible that the termination of the first word is *sya* instead of *sa*, but it should be observed that the genitive following *danamukhe* decidedly ends in *sa*. The reading *sadareśarisa* here, as in No 9, is founded on conjecture. But a comparison with the Loriyān Tangai inscription, where the same expression occurs combined with two proper names in the genitive case, adds to the proposed restoration a certain amount of probability.

It would seem that No. 4 (Plate LXVIII, fig. 3) has once formed part of a similar relief. At any rate it is certain that it represents a Bodhisattva (possibly Padmapani) in exactly the same attitude as the broken figure of the previous sculpture He is seated in the European fashion on a cane-stool, his right leg, the foot of which is missing, drawn up. From a comparison with No. 10 it is evident that the curious-shaped footstool, on which his left foot and also the sandal of the right foot is placed, is nothing else but the upper portion of a lotus fruit.[2] On this the inscription (Plate LXX, fig. 7) is incised, but, owing to the stone being broken off at the bottom, we are here confronted with the same difficulty as in the preceding epigraph Here, moreover, the fourth *aksara* is half destroyed and the final portion is so badly engraved that I cannot offer any intelligible reading for it. The inscription consists of only one line 18 cm. long which follows the curve of the edge of the sculpture. But at the end some letters are written above and partly crossing the others. The *akṣaras* are somewhat smaller in size than in No. 10. I read the first-half of the inscription:

Amohakasa danamukhe . . . .

"The gift of Amohaka . . . . "

The Hāritī image No. 9 (Plate LXIX, fig. 3) was edited as a posthumous work of Dr. A. W. Stratton, which his lamented death left unfinished. For a complete reading of the epigraph (Plate LXX, fig 9) we are indebted to M. A. M. Boyer. The inscription cut vertically to the proper left of the image consists of two lines, measuring 40 and 34 cm. respectively. The size of the letters is from 2 to 3.5 cm. The execution of the inscription is very inferior, quite in accordance with the debased style of the sculpture itself.

[1] Grunwedel Burgess, *op. cit*, p. 202, fig. 147.

[2] The Mathurā Museum contains a fragment consisting of the lower portion of a Bodhisattva seated in the same posture. There also we find the empty sandal of the right foot standing on the footstool.



a



b



c



The first line was read by Dr. Stratton:

Vaṣra ekunaśitaśatimae (or *ekanavitaśatimae*) *Aṣaḍasa*[1] *masasa 4 Budhavare.*

"In the year 179 (or 197) on Wednesday the fourth of the month Āṣāḍha."

M. Boyer's reading is as follows:

1. *Varṣa ekunaśit* [*i*] *śatimae aṣaḍasa masasa di* [*ro*] [*khu*] [*to*] . . .
2. *sagabha dana śamayeta duśamya ma*[*ṣu*]*ra tanayeṣu.*

"The year 179, the tenth day of the month Āṣāḍha, the gift of [Khuto—]: (a statue of Hāritī) with a niche. May she heal the small-pox on the children."

For Nos. 13 and 14 it will suffice to refer to the first volume of this publication and to Plate LXVII, fig. 2, which represents the pedestal of Pālāṭū Ḍherī.

As the great majority of the epigraphs discussed are incised on the pedestals of Buddhist statues, it will not be out of place to offer a few remarks on those objects, which hitherto have drawn but little attention. As appears from the above, such pedestals are commonly decorated with a relief carved on its front and enclosed between a pair of Indo-Corinthian pilasters.[2] In a very few cases these reliefs refer to a certain event in the life of Śākyamuni, such as No. 916 of the Lahore Museum, which represents the *parinirvāṇa.* On No. 1189 we find only a seated Buddha, on No. 1212 three seated Buddhas without any worshipper. Both were excavated at Chārsada by Lieutenant M. Martin. A very exceptional subject occurs on No. 353 of the Lahore Museum (Plate LXVIII, fig. 4), where we find two sitting figures: that to the proper right is a male, holding in his right hand a long staff or lance. His feet are placed on a footstool. The left figure is a female with a modius on the head and a cornucopia in the left hand. The one I take to represent Vaiśravaṇa or Kubera, the god of wealth, of which we possess similar effigies in Gandhāra sculpture. The other is presumably a goddess of abundance and fertility, but whether her Indian name is Hāritī, Vasudhārā, Cārvā, Annapūrṇā, or something else, I am unable to decide. This figure is of interest, as it is almost identical with that found on a coin of Azes which has been interpreted as Demeter.[3] It is, as far as I know, only found on coins of that ruler who presumably was the successor of Maues, whose date, for numismatic reasons, cannot be later than the middle of the first century B.C.[4]

In all other instances these front-reliefs represent what has been styled "a scene of adoration," *i.e.*, we find a seated Buddha, or more commonly a Bodhisattva, in the centre and some adoring figures standing or kneeling on both sides. Sometimes the object of worship is an almsbowl or a fire-altar. The latter occurs, *e.g.*, on the inscribed pedestal No. 5 where it is being worshipped by three male and an equal number of female lay devotees. Another instance is found on the well-known emaciated Buddha (more correctly Bodhisattva) Śākyamuni. I must confess that I am doubtful

[1] Asaḍa instead of Aṣaḍha is also found in the Zeda inscription. Cunningham, *A. S. R.*, Vol. V, p. 57, Pl. XVI, and Senart, *J. A.* Series 8, Vol. XV (1890), p. 136.

[2] *Cf.* Burgess, *J. I. A. I.*, Vol. VIII, No. 62. (April 1898), Pl. 13, fig. 5. There is another pedestal (No. 915) in the Lahore Museum, showing Śākyamuni's head-dress being worshipped, which might be reckoned under the same category. Both are said to originate from Jamālgarhī.

[3] Gardner, *Catalogue of Indian Coins in the British Museum, Greek and Scythic kings* (London, 1886), p 84, Nos. 127 *sqq.*, Pl. XIX, fig. 2.

[4] Gardner, *op. cit.*, p. XL, *sq.*

[5] Senart, *J. A.*, Series 8, Vol. XV (1890), pp. 141 and 153 *sqq.*, Burgess, *J. I. A. I.*, Vol. VIII, No. 62 (April 1898), Pl. 3, fig. 1.

whether this so-called fire-altar has anything to do with fire-worship, of which, as far as I know, no trace is to be found in the sacred literature. It seems to me much more probable that those "fire-altars" really represent stands carrying a vessel with oil or *ghī*, in which a wick is burning such as I have seen in the Buddhist temple of Trilokanātha (*i.e.*, Avalokiteśvara) on the Candrabhāgā. Possibly incense was also burnt in such vessels. On the base of a sitting Buddha image (No. 65) in the Lahore Museum I noticed the kneeling figure of a *śramana* holding a censer (Hindī, *dhūpdānī*) of the kind used in Brahmanical temples up to the present day. (Plate LXVI, fig. 2)

To return to the ordinary type of pedestals, the question arises whether their reliefs are merely decorative or have some meaning in connection with the image to which they belong. It is noteworthy that the adoring figures always present the appearance of human beings. At least I do not know any instance of their being marked as *devas* or *nāgas* by halo or snake-hood. Yet it is well known that elsewhere such divine or semi-divine beings are portrayed as worshippers of the Buddha as often as mortals are.

The number of adoring figures varies. Mostly we find an equal number on each side. This we should naturally expect if the sculptor were to be guided only by æsthetic considerations. That this, however, was not always the case seems to be proved by such instances as the Hashtnagar pedestal, where we meet with three worshipping figures. Nor does there exist any uniformity with regard to their dress, sex and age. Sometimes they are monks (and nuns?) recognizable from their robe and shaven head. More often we find lay-members of the Buddhist community, both male and female. Such figures as are somewhat smaller in size are evidently meant for children. If we compare the great similarity of the Buddha or Bodhisattva statuettes in the centre with the striking variety of the worshipping figures on the pedestal, we are led to the conclusion that these are not merely decorative representations of devotees in general, but are intended to portray in each case special members of the *saṅgha*. Assuming this, what are they more likely to be than the people to whose devotion the statue owed its origin? We know from numerous votive inscriptions that such a pious work was mostly executed at the expense and for the benefit of more than one person. Generally the donor wished his wife, brother, *guru*, or some other close relative of his, to participate in the merit to be derived from it. We can, therefore, easily understand why the worshipping figures occur in varying numbers and include women and sometimes children. We also understand why we find the effigies of monks on the Chārsada pedestal (No. 6), which, as the inscription shows, was the donation of a śramaṇa.

The practice here referred to is proved by inscriptions to have existed in mediæval Indian art. Through Gandhāra we can trace its origin back to classical influence. An interesting example in Græco-Buddhist sculpture has been pointed out by Professor Grünwedel. In discussing a relief from Muhammad Nari, now in the Lahore Museum (No. 1134), he puts the question whether the human worshippers standing on both sides of the eight Buddhas in the lower compartment of the sculpture can be the donors of the relief.[1] There is every reason to answer the query in the affirmative. The three figures to the left of the Buddhas are a *śramaṇa*, an *upāsaka*,

[1] Grünwedel-Burgess, *Buddhist Art in India*, p. 188 (fig. 82).

and an *upāsikā.* Of the four to the right, the heads of which are mutilated, two seem to be *upāsakas,* the third an *upāsikā* and the fourth a child. In the central portion two kneeling figures, the heads of which are lost, will be noticed. With their arms they seem to embrace the lotus on which the Buddha is seated. These also seem to be human worshippers. Can there be any relationship between the two kneeling persons and those standing below? It is impossible to give a definite answer to this question, but it would not seem improbable that the two, kneeling at the foot of Buddha's lotus-seat, represent the deceased parents for the sake of whose bliss in the next world (*paralokārthaṁ*) this pious work was dedicated by their children.

There is another sculptured slab[1] from the same find-place in the Lahore Museum (No. 1135), on which the Buddha seated on a lotus in the attitude of expounding the law (*dharmacakra-mudrā*) occupies the centre of a group of Buddhas, Bodhisattvas and celestial beings. Here the lotus rises from the waters, perhaps meant for the ocean of existence (*saṁsārārṇava*), in which aquatic animals together with Nāgas and Nāgīs are visible. I may note in passing that the practice of showing these demi-gods issuing half-way from the waters over which the Buddha is enthroned is preserved both in Javanic and Lamaistic art.[2] But for my present subject it is of more interest that on the relief in question next to those Nāgas a male and a female figure are standing to the right and left of the *padmāsana.* Excepting the Nāgas, recognizable from their snake-hoods, these two are the only figures not provided with a halo; they are human beings and presumably the donors of the relief.[3]

It has been noted above that the devotees whose figures we find carved on the pedestals are represented adoring not the Buddha himself, but either a Bodhisattva or some sacred object. Though it was considered a meritorious act to erect a statue of Śākyamuni, mortals could not expect any protection against evils from him who had passed away in Nirvāṇa. The Bodhisattvas, on the contrary, and especially Maitreya whom we have recognized on several of our pedestals, were helping deities, whose goodwill was to be propitiated. In this manner, I believe, we are to explain those figures. That an almsbowl is so often seen as the direct object of worship, cannot be a matter of surprise, since we know that one of the chief monuments of Puruṣapura, the present Peshāvar and capital of Gandhāra, was a *stūpa* containing Śākyamuni's *pātra* which was worshipped there for many centuries. In the days of Fa-hien it was still there, but at the time of Hiuen-Tsiang's visit it had passed into Persia.[4]

Finally, I wish to offer a few remarks on the date of the sculptures under discussion, particularly Nos. 7, 8 and 9. The scanty material at our disposal will not enable us to arrive at a definite conclusion. Such a conclusion can only be hoped for from a discussion of the question in connection with all other available documents. I will only point out what, with regard to the inscribed sculptures, would be the most plausible solution of this difficult problem. The main point, of course, is to make out to which era the three dated inscriptions refer.

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[1] Burgess, *op. cit.*, Pl. VII, fig. 2.

[2] Grünwedel, *Mythologie des Buddhismus in Tibet und der Mongolei.* B. Kersjes and C. den Hamer, *De Tjandi Mendoet vóór de restauratie* (Batavia, The Hague, 1903), Plate 17.

[3] The figures with haloes seated on the same row are perhaps the four *lokapālas,* who in Tibetan pictures often occupy the lower compartment. In Gandhāra they appear in the same costume as the Bodhisattvas.

[4] *Si-yu-ki* (transl., Beal), Vol. I, pp. XXII *sqq.* and 98 *sq.*

Mr. V. A. Smith first suggested that the era referred to in the Hashtnagar pedestal inscription was the Śaka era, but abandoned this idea after Dr Bühler had pointed out its improbability The latter was of opinion that the type of Kharosthī is that of the time of Kaniska and Huviska, and that the epigraph could not be assigned to a much later date It should be remembered that both scholars had adopted, on the authority of Sir A. Cunningham, 274 as the year expressed by the figures on the pedestal. The corrected reading 384 now universally accepted would make Mr Smith's first hypothesis still more open to objection

In a subsequent paper on the Kusana period[1] Mr Smith, while adopting the Saptarsi-samvat for all Gandhara dates below a hundred expresses the opinion that the Hashtnagar and Loriyān Tangai pedestals as well as the Kaladarra inscriptions are probably dated in an era equivalent, or nearly equivalent to the Vikrama era That the Mālava era itself should have been used by Græco-Indian sculptors in the borderland of India during the first centuries of the Christian era cannot well be maintained.[2] But is it more satisfactory to assume an imaginary era starting at about the same time? Granting that such an era existed, it must be admitted that its application to the Hashtnagar pedestal inscription does not lead to a very plausible conclusion According to Mr Smith's theory the date would be equivalent with A D 327, which means about the beginning of the Gupta period and a century after the end of the reign of Vāsudeva, the last of the great Kusana rulers

Nor can I agree with Mr Smith in his depreciation of the artistic merit of the Hashtnagar sculpture The author possibly would have modified his views after a visit to the Lahore Museum It should be remembered that naturally the best specimens of Gandhāra art have been selected for publication. The sculptures published by Dr. Burgess and others are decidedly above the average Even a large and miscellaneous collection like that preserved at Lahore cannot be considered to give an absolutely correct impression of the Gandhāra school taken as a whole especially as in the old days explorers made it their particular object to secure good specimens of sculptures.

The pedestal alone, as remarked by Mr Smith, is perhaps an insufficient basis for discussing the point in question, and we therefore offer a reproduction of the image itself (Plate LXIX, fig 1) which is now being worshipped by the Hindu community of Rājar. It is true that the Buddha in his present surroundings, deprived of his pedestal and of his arms, and, moreover, provided with a head belonging to another smaller statue and blackened to suit his present *rôle* of Kālikā Devī does not show to advantage But all this does not prevent one from noticing the excellent arrangement and execution of the drapery of his robe I have no doubt that the Hashtnagar statue, though not the very best product of Græco-Buddhist art, may be assigned to the "bonne époque," when classical influence was at its strongest Let me add, too, that all the sculptural remains found in Pālāṭū Ḍherī, the find-spot of the inscribed image, exhibit good workmanship.

It is a point on which most authorities agree, that the palmy days of Buddhism

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[1] V A. Smith, *The Kushān, or Indo-Scythian, Period of Indian History, B. C. 165 to A. D. 320* in *J. R. A. S.*, Jan. 1903, pp. 14 and 42.

[2] The earliest epigraphs in the Panjab, dated according to an established era, *viz.* the Baijnāth *prasastis* refer to the Śaka-samvat. *Cf.* Buhler, *Ep. Ind.*, Vol. I.

PLATE LXIX



a



b



c

Photogravure

Sur ey of India Offi es C lcutta May 190

and Buddhist art in Gandhāra coincide with the reign of the great Kuṣaṇa kings and more especially with that of Kaniṣka. This is somewhat more than a hypothesis. On the sculptures themselves we find figures of devotees, perhaps even donors, who bear a close resemblance to the Skythian kings on the coins. Such coins were found in great number in Pālāṭū Ḍherī: a few belonging to the earlier Kuṣaṇas, but the bulk to the later, under whom no doubt the building was destroyed by fire.[1]

These considerations prevent me from accepting Mr. Smith's second theory, and I come to the conclusion that neither the Śaka nor an equivalent of the Vikrama Saṁvat will suit the case. Before resorting to a hypothetical era, it will be wise to see whether any existing one can be adopted. Since M. Senart's brilliant discussion[2] of the date of the Gandhāra school, it has, I believe, been accepted by most scholars that the first two centuries of the Christian era represent its flourishing period, and as within that period its history is marked by steady degeneration, the best works will have to be assigned to the earlier half of it. Taking for granted that the inscribed image of Hashtnagar may be ranked among the better works, in which Hellenistic influence is strongly felt, we require an era the starting-point of which lies between B.C. 384 and 284. Such an era exists. That of the Seleukids began in B.C. 312. The probability that this era was used in the North-West of India is strengthened by the occurrence of the names of Macedonian months in Indo-Skythian inscriptions. The dated coin of Plato[3] proves that it had been adopted by the Bactrian kings who carried Greek influence into India. What seems more plausible than that this era of the Seleukidai should be found in connection with sculptures which betray so strong a Hellenistic influence? The date of the Hashtnagar pedestal, if referred to that era, would be A.D. 72.

There is no reason to suppose that the Loriyān Tangai inscription refers to a different era. Judging from the photograph at my disposal (Plate LXIX, fig. 2), the statue would seem to be inferior to the Hashtnagar one. Are we therefore obliged to assign to it a later date? Certainly not. Time is not the only agent which determinates a work of art. We may assume that at Puṣkalāvatī, the ancient capital of Gandhāra, better artists were available than elsewhere. The Buddha of Loriyān Tangai has unfortunately shared the fate of that of Hashtnagar. He is headless, handless, and besides much injured. But the style of the drapery and of the pedestal is decidedly classical, and it is style more than workmanship which must be taken into account. Moreover, it is not likely that a statue of this size would have been executed at a time when Buddhism was on the decline. If we assume the Loriyān Tangai inscription also to refer to the Seleukid era we obtain A.D. 6, a date which, I admit, seems rather early, but which is by no means impossible.

The Hāritī image (Plate LXIX, fig. 3), on which the third dated inscription is found, affords an example of very degenerate Gandhāra work. Dr. Stratton in his scholarly discussion has compared it with the Sikri image, which manifestly represents the same goddess. The latter belongs decidedly to the palmy days of Græco-Buddhist art: to the first or perhaps the second century. In its counterpart the "indianisation" is so pronounced that it can be hardly less than a century later. It is

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1 *A. S. R.*, 1902-03, pp. 164 and 172.

2 E. Senart. *Notes d'épigraphie indienne. J. A*, Series 3, Vol. XV (1890), p. 143 *sqq.*

3 Gardner, *Catalogue*, p. 20

clearly impossible to refer its date to the Seleukid era Nor does it seem probable that the Vikrama era was used, as Dr. Stratton suggested This would yield A D. 140, a date at which we should not yet expect such an utterly debased style The Śaka era would suit the case best About the middle of the third century we may assume that Græco-Buddhist sculpture had declined to a level represented by the Hāritī image. Unfortunately there is no indication of the Śaka era having been in use in Gandhāra at so early a time To the theory that Kaniska's *abhiseka* was its starting-point serious objections have been raised Anyhow, it is highly probable that Kaniska instituted an era of his own, whatever the starting-point may have been This at least is the most natural explanation of the existence of a series of epigraphical records dated from 5 to 98 [1] and containing the names of that ruler and his immediate successors. The safest course will be to refer the date of the Hāritī inscription to the same era as is used in the Kusaṇa inscriptions which would make it about a century posterior to the beginning of Vāsudeva's reign

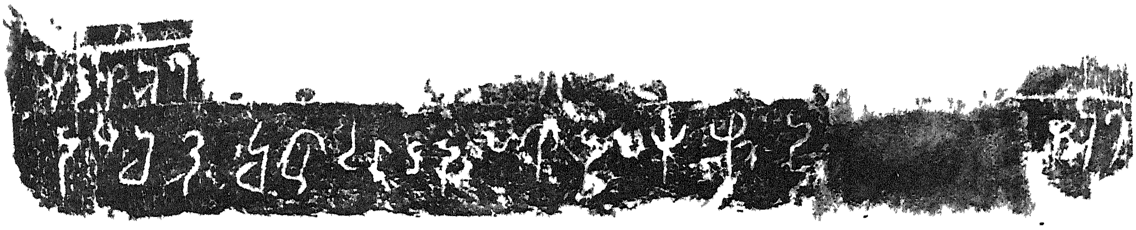
J PH. VOGEL.

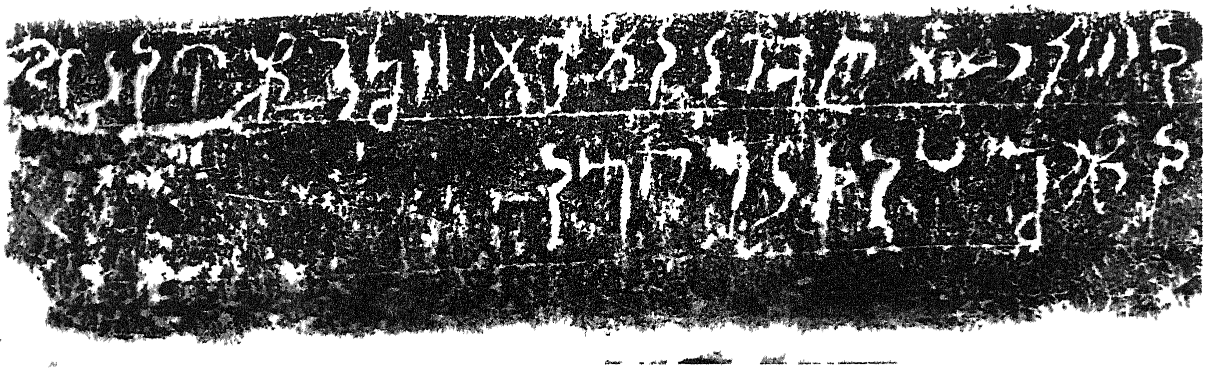
[1] I leave aside the doubtful Nos 71 and 72 of Mr. Smith's list, *loc. cit.*, pp. 13 *sq.*


1


2


3

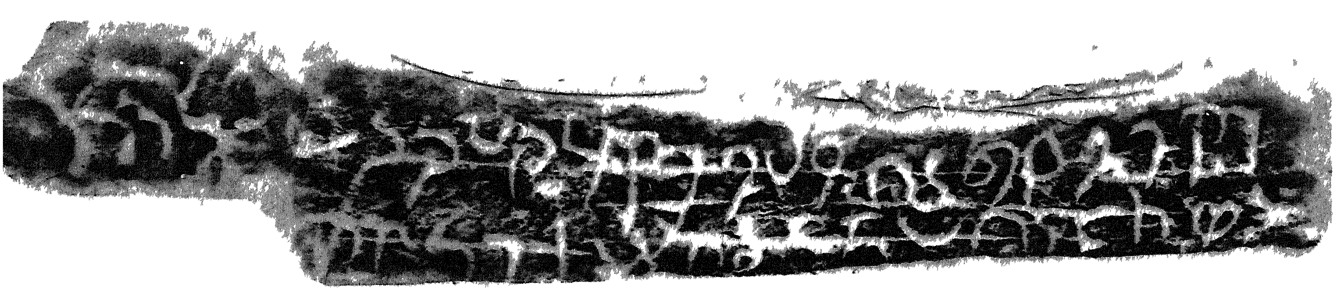

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6


7


8


9

A COPPER-PLATE GRANT OF BAHĀDUR SIṄGH OF KUḶḶŪ.

AMONG the copper-plates in possession of Paṇḍit Mohan Lāl, *guru* to His Highness the Rājā of Chambā, there is one, which presents the exceptional case of a grant, the grantee of which can be readily identified, whereas the identification of its donor affords a certain amount of difficulty. The grantee, "the great Paṇḍit Ramāpati, the son of Paṇḍit Surānand and a resident of the illustrious town of Chambā," was an ancestor of the present owner of the copper-plate and must have held the office of *rājaguru* for more than half a century, under three, perhaps even four, consecutive rulers of Chambā. His name occurs as that of the author of the title-deed on the copper-plates issued by Pratāp Singh, and on those of Balabhadra, the latter's grandson, during the earlier part of his reign It is clear that Ramāpati must also have been the spiritual preceptor of Balabhadra's father Vīrabhāna, though it is not attested by any document His name is last found on a plate dated Śāstra-samvat 86, Vikrama-samvat 1667, Kārttika ba ti 11 [1] The next grant issued by Balabhadra in Śāstra-samvat 5, Vikrama-samvat 1686, Māgha śu ti. 12, is signed by a Paṇḍit Padmanābha, and all later plates by Ramāpati's son Laksmīkānta We may therefore assume that the death of Ramāpati occurred between the two dates mentioned. The earliest mention of his name is on the copper-plate, which is here edited for the first time. We do not know who ruled Chambā in the Śāstra year 35 (A D 1559); probably it was Gaṇeśavarman, who was certainly still Rājā in the preceding year. That Ramāpati stood high in favour with his noble patrons, appears from the fact that three more plates, besides the present one, record grants of land bestowed upon him, namely, two of the four plates which we possess of Pratāp Singh, and the first of the twenty plates of Balabhadra

It is strange to find that the donor of the grant under discussion does not bear one of the four names enumerated, but calls himself Bahādur Singh From his titles it may be inferred that he was an independent chief, but the name is not found in the

[1] See the list of Chambā copper-plates published *A S. R.* 1902-03, pp. 245—6.
The Śāstra-saṁvat is the same as the Saptarsi-saṁvat, or Lokakāla, also known as Rāja-samvat, Pahāri-saṁvat or Kaccā-samvat. *Cf.* Cunningham. *Book of Indian eras*, p. 6 *sqq.*

genealogical roll of the Chambā rājās, nor in any other copper-plates. The simplest explanation would be to assume that Bahādur Siṅgh was another name of Rājā Gaṇeśavarman, which would be in agreement with the custom of double nomenclature still in vogue among the Chambā rulers. This assumption would be the more plausible, as the inscription mentions as second donor the heir-apparent (*yuvarāja*), Pratāp Siṅgh, and this was as stated above, the name of Gaṇeśavarman's son and successor.

On the other hand, it is noteworthy that Chambā is only mentioned as the place of residence of the grantee, not as that of the donor, as is the case with all other copper-plates issued by Rājās of Chambā. It is also remarkable that the motto *Satyam pramāṇam* of the donor of this grant is not found on any of Gaṇeśavarman's plates. A still greater objection is that none of the localities mentioned in the inscription are known to exist in Chambā. May we assume then that Bahādur Siṅgh was the ruler of some other State? The supposition is admissible, for among the plates of Balabhadra is one which is issued in favour of the *guru* of his neighbour, the Rājā of Nūrpūr.

The surname Siṅgh was only in use among a limited number of Rājpūt families, as in Kuḷḷū, where it replaced the older Pāl. It is said that the first Rājā of Kuḷḷū who adopted the surname was Sidh Siṅgh. Now we find that the name of his successor was Bahādur Siṅgh, and there is every reason to believe that he was the donor of the grant in question. The exact date of his reign is unknown, but Jagat Siṅgh, who ruled in the middle of the 17th century, is separated from him by four Rājās. Assuming twenty-five years for each reign, we arrive at the conclusion that Bahādur Siṅgh must have lived about the middle of the 16th century, which is, as we saw, approximately the date of our inscription. Moreover, Bahādur Siṅgh's successor was Pratāp Siṅgh, who consequently must have been *yuvarāja* during his lifetime.[1]

Our hypothesis will become a certainty, if the localities mentioned in the grant can be identified with places in Kuḷḷū. For it is clear that a Rājā cannot dispose of land outside his own territory.

The "hermitage of Pulastya" (*Pulastyāśrama*) I am unable to identify with certainty. Though the worship of *ṛṣis*, locally called *rikhis*, is very prominent in Kuḷḷū, no shrine dedicated to Pulastya is said to exist. Mr. H. Calvert, I.C.S., Assistant Commissioner of the Kuḷḷū Sub-division, has, at my request, made enquiries regarding this point on the occasion of the Dasahra fair at Sultānpūr. But among the numerous *ṛṣis*, *nāgas* and other *devatās* gathered to pay their respect to Raghunātha, Pulastya was conspicuous by his absence.

The second locality mentioned in the grant of Bahādur Siṅgh is the village of Haṭṭa. This, I believe, can be identified with certainty. On the confluence of the Biyās and the Ropṛu nālā, half a mile east of Bajaurā (map Bajaora; lat. 31°50′, long. 77°13′) we meet with a hamlet of the name of Hāṭ, which would exactly correspond with Skr. Haṭṭa (*Cf. ghāṭ*, from Skr. *ghaṭṭa*, and *gharāṭ*=watermill, from Skr. *gharaṭṭa*). Hāṭ is also the name of one of the two *phāṭīs*, in which the Bajaurā *kōṭhī* is sub-

[1] *Cf.* the list of the Kuḷḷū Rājās in Capt. A. F. P. Harcourt. *The Himalayan districts of Kooloo, Lahoul, and Spiti* (London, 1871), p. 370 *sqq*. The genealogical list of the Kuḷḷū Rājās is evidently based on an authentic *vaṁśavalī*. Unfortunately no proper system of transliteration has been followed, which renders it often impossible to decide on the correct forms of the names. Compare, for instance, Shureedut Taeshur Pal and Shirree Jerashur Pal. It would be well to re-edit the list, if the authentic *vaṁśāvalī* were procurable.

divided.[1] The Sanskrit word *haṭṭa* means "a market," a very appropriate name for the spot, where the Central Asian trade route, after crossing the Dulcī Pass, reaches the Upper Biyās valley. The antiquity of Hāṭ is attested by a very fine *liṅga* temple, profusely decorated with carvings[2] and by the remnants of three more stone temples. One of these, known as Jhaumpṛu śail (*śail*=a stone temple from *śilā*=stone), was still extant in the summer of 1901, though much ruined and partly buried in the sands of the Ropṛu Khaḍ. This points to the fact that this stream has changed its course, which probably was the reason why Hāṭ became superseded by Bajaurā, situated at a safe distance from the dangerous confluence.

It will be seen that the Ropṛu *nālā* is the boundary between Kuḷḷū and Maṇḍi, as noticed by the traveller Moorcroft,[3] who also mentions the Bajaurā fort, which must have been demolished shortly before 1870. Its site is now occupied by a tea plantation. I am inclined to think that this fort (or a previous one standing on the same spot) is referred to in our copper-plate, if at least we may assign to the word *draṅga* the same meaning which it once had in Kaśmīr, namely, that of "a frontier fort, or a watch station."[4]

In the same passage Moorcroft says that the Ropṛu flows at the foot of an eminence, on which stood the village of Syri. This I feel inclined to identify with the Sīrī-sthāvara of the copper-plate. Its position not far from Hāṭ would make the identification very plausible. I must, however, remark that, according to the information supplied by Mr. Calvert, the correct form of the name would seem to be Sairi. On the survey-map the name Sirg evidently marks the position of the village referred to by Moorcroft. It is interesting to find that the land granted by Bahādur Siṅgh consisted of saffron-fields. Cultivation of saffron, for which Kaśmīr is still famous,[5] is nowadays practically unknown in Kuḷḷū, though the physical conditions are probably as favourable there as in the valley of the Jhelam. Mr. Calvert informs me that there used to be saffron fields in Kuḷḷū. There was one, he says, quite near and below the castle which is now a tea-field belonging to Mr. Minniken; and up to five or six years ago there were a few saffron plants remaining there. It will be noticed how well this agrees with the topography of our inscription. For it was the ancient castle of Bajaurā, near which the saffron-fields granted to Paṇḍit Ramāpati must have been situated. The area of the granted land is expressed in *prastha*, a measure of grain, according to the custom, universally practised in the hills, of indicating the size of the land by the quantity of seed-corn required for its cultivation.[6] The *pathā* (the modern form of *prastha*) is still the unit used in Kuḷḷū for measuring grain. One *pathā* of husked rice is equivalent to $4\frac{1}{3}$ *kaccā ser* (nearly 2 *pakkā ser* or 4 lbs.). Twenty *pathā* make one

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1 *Kangra Gazetteer* (Lahore 1899), Pt. II, p. 125.

2 Capt. Harcourt, *op. cit.*, pp. 196 and 347 *sqq.*, gives an enthusiastic, but not always accurate, description of this temple and its decoration. The alto-rilievoes represent Gaṅgā and Yamunā on both sides of the entrance, and Gaṇeśa, Viṣṇu and Durgā Aṣṭabhujā in the outer niches of the south, west and north walls, respectively. *Cf.* also Moorcroft, *Travels*, Vol. I, p. 169 *sq.*, and J. Calvert, *Vazeeri Rupi* (London, 1873), p.15 *sqq.*

3 "This river (the Rupareri, *i.e.* the Ropru) here divides Mundi from Kulu, and running under the walls of Bajaura, falls into the Byas on its right bank. Bajaura is a large square fort belonging to Kulu; it consists of square towers connected by a low curtain, the whole built of hewn stone strengthened with beams of fir." Moorcroft, *op. cit.*, p. 169. *Cf.* also Calvert, *op. cit.*, p. 13 (with a picture of the fort).

4 *Cf. Rājat.* (transl., Stein), Vol. II, p. 391.

5 "Learning, lofty houses, saffron, icy water and grapes: things that even in heaven are difficult to find, are common there (*viz.* in Kaśmīr)," *Rājat.* I, 42., *Cf.* Dr. Stein's note here and at I, 220 also.

6 *Cf.* Dr. Stein's note at *Rājat.*, V. 71 and *A. S. R.*, 1902-03, Vol. I, p. 250, foot-note 10.

lākh.[1] The total area of the land given to Paṇḍit Ramāpati was therefore $4\frac{1}{2}$ *lākh*, and required 180 *pakkā ser* of seed-corn for its cultivation.

As we have thus been able to locate in Kuḷḷū at least one of the places mentioned in the grant of Bahādur Siṅgh, his identity with the Kuḷḷū Rājā of that name may be regarded as certain. This conclusion adds considerably to the interest of the inscription. Kuḷḷū is undoubtedly one of the most ancient principalities of the Panjab Hills. It is described by Hiuen Tsiang[2] under the name K'iu-lu-to, and on two Chambā copper-plates[3] of the 11th century mention is made of the Lord of Kulūta, which is the ancient designation under which it is repeatedly referred to in Sanskrit literature. Nevertheless not a single pre-Muhammadan inscription has come to light in Kuḷḷū, a fact which is probably due to the backwardness of its inhabitants, who are described by Hiuen Tsiang as "coarse and common in appearance" and "of a hard and fierce nature." The inscriptions found in Kuḷḷū are all comparatively modern; they are without an exception composed in the local vernacular and written in a kind of Ṭākarī derived from the ancient Śāradā.[4] These two circumstances combined render their interpretation far from easy. One of the oldest epigraphs is that on the famous temple of Ḍhuṅgrī near Manālī, in the upper part of the Biyās valley, which is known as Wazīrī Paroḷ.[5] This shrine, profusely decorated with wood-carving, is dedicated to Hiṛmā Devī, the patron goddess of Kuḷḷū, in whom students of Sanskrit literature will recognize the *rākṣasī* Hiḍimbā, the spouse of Bhīmasena the Pāṇḍava. The inscription is of special interest for my present subject, because it mentions the name of Rājā Bahādur Siṅgh as founder of the temple. Its date is J(y)eṭh pra. 20, the 29th year of the Śāstra-saṁvat. The figures indicating the centuries are omitted, which is characteristic of this era, so that it would be impossible to fix its date without the aid of some other document. This we possess in our copper-plate which is dated Saṁvat 35, Kārttika śu. ti. 11. It is true that here also the date is expressed in the Śāstra-saṁvat, but, as we know that the grantee died between A.D. 1610 and 1629, the figures for the century can be supplied with certainty. The corresponding Christian year must be 1559. Consequently the year of the Ḍhuṅgrī inscription can only be A.D. 1553, and we have thus been enabled to date one of the most interesting monuments of the Kuḷḷū valley.

Another prominent temple of the upper Biyās valley is that of Saṁdhyā Devī or "the goddess of dawn" in the ancient village of Jagatsukh, which traditionally is believed to have once been the capital of Kuḷḷū. The temple of Saṁdhyā Devī has been largely renewed, but it contains some portions which are evidently ancient. On two slabs placed on the enclosing wall at the entrance of the court-yard an inscription[6]

[1] *Cf.* Kangra Gazetteer, Pt. II, p. 104, and A. H. Diack, *The Kulu dialect*, p. 83. s. v. *pathā*.

[2] *Si-yu-ki* (transl., Beal), Vol. I, p. 177.

[3] *A. S. R.*, 1902-03, p. 268.

[4] Dr. Bühler, *Indische Palæographie*, p. 57, speaks of "die sogenannte Ṭakkarī der Dogrā von Jammu and Nachbarschaft." In reality Tākarī (or Ṭāṅkarī) is commonly used all through the Panjab Hills, and is also known in the plains.

[5] The word *paroḷ*, *proḷ* in the dialects of Kāngṛā, Kuḷḷū and Chambā, means "the main gate of any large building, especially a palace or castle and, used as *pars pro toto*, the palace itself." It is a very appropriate name for that narrow part of the upper Biyās valley, which towards the Rohtang pass assumes the appearance of a gate. The word *paroḷ* is presumably like Hindī *paul* derived from Skr. *pratolī*. See my note in *Album Kern* (Leiden, 1903), p. 235 *sqq*.

[6] A facsimile (evidently a hand-copy) will be found at the end of Captain Harcourt's book. I may note in passing that the inscription of Basiṣt, of which also a facsimile is given, is written in the Telugu character, presumably by some wandering mendicant on his visit to the sacred spring.

is cut in three lines of 40 to 48 cm. in length. I must, for reasons stated above, abstain from giving a full transcript and translation of this epigraph. So much is certain that the first line reads: *Śrī Mahārāja Udhran* (read *Urdhan*[1]) *Pāl*. The second line commences with the name of Saṁdhyā Devī, and the third seems to contain a date, which I read *Saṁ. 4* (?) *ba. ti. 2*. It refers of course to the Śāstra-saṁvat, and we must look for some other document to decide which figure we are to supplement for the hundreds.

The name U[r]dhan Pāl is found in the *vaṁśāvalī*, as that of Bahādur Siṅgh's third predecessor. The date of the temple of Saṁdhyā Devī is therefore separated from that of Hiḍimbā by the time occupied by the full reigns of Kailās Pāl and Sidh Pāl, and the partial reigns of Urdhan Pāl and Bahādur Siṅgh. We may say by three full reigns. We shall therefore have to take either A.D. 1428 or 1528 as the date of the temple at Jagatsukh. In the first case the reigns of the intervening Rājās would have been very long, namely, some forty years each; in the second case they could not have exceeded an average of seven years. The latter assumption seems to me the more plausible. Possibly the Jagatsukh inscription falls towards the end of Urdhan Pāl's reign and that of Ḍhuṅgrī in the beginning of that of Bahādur Siṅgh, which would leave a somewhat larger space for the two intervening reigns of Kailās Pāl and Sidh Pāl.

The above topographical discussion points to the fact that Bahādur Siṅgh ruled over the whole of Kuḷḷū proper, *i.e.*, the upper Biyās valley. This is quite in accordance with the tradition which holds that he was the first to extend his territory,[2] which under the Pāl dynasty consisted only of Wazīrī Paroḷ. There is one point, however, still to be elucidated. The present Wazīrīs, Lag Mahārāja and Lag Sārī, once formed an independent principality which was overthrown by Rājā Jagat Siṅgh. This is fully confirmed by one of the Persian *Sanads*, dated the 3rd of Jumāda-th-thāniyah, A.H. 1067, addressed by Dārā Shikoh to Jagat Siṅgh "*zamīndār*" of Kuḷḷū.[3] As we have seen that Bahādur Siṅgh's rule extended over Bajaurā and Ḍhuṅgrī, we shall have to assume that the principality of Lag, situated between those two places, though ruled by its own Rājā, was tributary to the Mahārāja of Kuḷḷū. Another point closely connected with this question is that of the origin of Sultānpūr, the modern capital of Kuḷḷū. This place, situated on the confluence of the Biyās and the Śarvarī stream, is said to have become the capital in the reign of Jagat Siṅgh, who conquered it from the last Rājā of Lag. The latter's name is given as Sultān Cand in the Kangra Gazetteer, but in the same work it is stated elsewhere that Jay Cand was the last Rājā of Lag, and Sultān Cand his brother. According to Captain Harcourt's informants, Sultānpūr was named after this Sultān Cand.[4]

It must, *a priori*, appear strange, that the new capital of the Kuḷḷū Rājās was named after a petty chief, by whose expulsion it fell into their possession. In the *sanad*, referred to above, the name of the Rājā of Lag, after whose death Jagat Siṅgh annexed the territory, is neither Jay Cand, nor Sultān Cand, but Jok (*read* Jog) Cand.

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[1] *Cf.* Dr. Bühler's remark, *Epigr. Ind.*, Vol. I, p.17.

[2] Harcourt, *op. cit.*, p. 115; *Gazetteer*, p. 19.

[3] Four original *Sanads* are in possession of Rājā Hira Siṅgh, Jāgīrdār of Dalāsh, and thirteen copies of *Sanads*, the originals of which are lost, I obtained from the Rāī of Rūpī.

[4] *Gazetteer*, p. 20 (foot-note), and p. 123. Harcourt, *op. cit.* p. 110.

This also tends to raise a doubt as to the authenticity of the said tradition. Nor is it in accordance with another tradition preserved by Moorcroft that "the removal (from Nagar, the ancient capital) took place about three centuries ago,"[1] which would mean about 1525 A.D.

It will be seen that in our inscription Bahādur Siṅgh calls himself by another name, Suratrāṇa-rājā. The word *Suratrāṇa* is often found in Sanskrit inscriptions,[2] as the rendering of the Arabic *sulṭān*, so that the name can mean nothing else than Rājā Sultān. And the fact is still known in Kuḷḷū, as Mr. Calvert informs me, that Bahādur Siṅgh called himself by that name. In connection therewith it is of great interest that there exists a tradition, different from that mentioned above, regarding the origin of Sultānpūr. During my stay there I was told by the old wazīr of the Raī of Rūpī, the descendant of the ancient Rājās, that Sultānpūr was founded by Sultān Siṅgh, and Ḍhālpūr, the suburb on the right bank of the Śarvarī, by his brother Ḍhāl Siṅgh. It will be noticed how well this agrees chronologically with the passage quoted from Moorcroft. For Sultān Siṅgh, *alias* Bahādur Siṅgh, ruled in 1653, and it is only natural that, after conquering the valley as far down as Bajaurā, he removed his capital to a place situated in the centre of his dominions, while probably keeping Nagar as his summer-residence. Anyhow, it seems to me highly probable, in view of the above, that it was not a defeated Rājā of Lag, but the victorious chief of Kuḷḷū, who gave his name to the modern capital.

We have already seen that the copper-plate grant under discussion mentions as second donor the heir-apparent Pratāp Siṅgh, and thereby establishes the authenticity of the genealogical roll of the Kuḷḷū Rājās published by Captain Harcourt. Our inscription acquaints us, moreover, with Bahādur Siṅgh's grand-wazīr (Skr. *mahāmantrin*) Nārāyan Siṅgh, and with the Rājā's three daughters Sunu, Gaṅgā and Raṅgo. For it was on the occasion of the marriage of these three ladies, that the grant was given to the *rājaguru* of Chambā; from which it may be inferred that they were married into the ruling family of that State. The bridegroom was presumably Pratāp Siṅgh, the heir-apparent (to wit, of Chambā), if he had not yet succeeded his father Gaṇeśa-varman by that time. For a Rājā of Kuḷḷū could not give his daughters in marriage to any one below a ruling chief or heir-apparent. The saying is that in matters of war and marriage a Rājā deals only with his equals. For two or more sisters to be married at the same time and to the same person is by no means an uncommon practice among Hill Rājpūts. The liberality shown on this occasion to Paṇḍit Ramāpati indicates that Bahādur Siṅgh attached much importance to a matrimonial alliance with Chambā. For we read at the end of the inscription that the Rājā "gave to Ramāpati the price of the land and again presented him with the same," *viz.*, he gave him in addition to the land its full value in money. And on his annual inspection of his possessions in Kuḷḷū he would receive a large hawk and a *ser* of saffron. The former may seem a somewhat unsuitable present to a pious Brahman, whose *dharma* forbids him to kill animals. But we know from elsewhere that the Rājās of Kuḷḷū, and probably other chiefs in the same position, were in the habit of sending a hawk as a tribute to

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[1] Moorcroft, *op. cit.*, Vol. I, p. 184.

[2] *Cf. Epigr. Ind.*, Vol. III, pp. 32, 40, 115 and 148; Vol. VI, pp. 2 and 270.

the Emperor of Delhi.[1] Bahādur Siṅgh evidently wished to do special honour to Ramāpati by a present otherwise due to his suzerain.

Besides a shop inside the frontier-fort, the *gurudakṣiṇā* comprised also "a very excellent *thathikā* to catch hawks," (*śyena-bandhana-thathikā parama-śreṣṭhā*). The word *thathikā* is not Sanskrit, but evidently a sanskritised vernacular term which would seem to be the modern *thātī* of the Kuḷḷū dialect, a technical term particularly used in connection with hawking. I quote the following from the Gazetteer:[2] "The best way of catching hawks was the *thātī*, which is a sort of triangular enclosure erected at a prominent place on a ridge or spur, so as to draw the attention of the birds. Poles are set up at the three angles, and two of the sides are enclosed with nets, but the base of the triangle which is towards the hill top is clear; the apex is on the down hill side. A *chikor* is tied close to the ground inside the enclosure to attract the hawks by its call, and when one swoops down upon it, a man who is concealed in a thicket close by rushes forward, and drives the hawk into the net where he secures it."

Regarding the inscription under discussion the following points may be noted: The copper-plate, on which it is engraved, is of irregular shape, the average height being 21·5 cm., and the breadth 26 cm. at the top and 32 cm. at the bottom. To the proper right a handle of 2 cm. in length projects. The inscription consists of 20 lines. The first seven lines are only from 21·5 to 22·5 cm. broad, leaving an open rectangular space to the proper right, which is occupied by the motto, and by lines 18-19, which are written vertically and are about 10 cm. in length. The last line is written all along the proper right margin. It would seem that these three lines were added afterwards. The letters which measure 1 to 1·5 cm. are well engraved. The character is a transition from the ancient Śāradā to the modern Ṭākarī or Ṭāṅkarī. It is interesting to note that *r* after a consonant is sometimes expressed in the old fashion by a stroke to the proper right (*cf. draṅga*, l.10) or in the modern way by a stroke to the proper left (*cf. caṁdra* l.18). The peculiar script used in the copper-plates of this period is designated in Chambā by the name of Devāśeṣa. The language is Sanskrit, metrical only in the quotations from the *Smṛti*, which occur in the second portion of the inscription. Though by no means free from errors, the language is comparatively correct, considering the date and the place of origin of the record. The mistakes are mostly due to negligence in observing the *saṁdhi* rules and in the use of the signs of punctuation. I have made only such corrections as seemed necessary for the right understanding of the meaning. The lengthy *Yamaka* compound in ll. 1-3 is regularly found in the Chambā grants of this period.

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[1] In a letter dated the 8th of Rabi 'u-l-awwal A.H. 1067, Dārā Shikoh acknowledges the receipt of a hawk and a hill pony (*tāngan*) sent by Rājā Jagat Siṅgh of Kuḷḷū as a present to the imperial court.

[2] *Kangra Gazetteer*, Pt. II, p. 109 *sq*. In Diack's *Grammar* the word is spelled *thātī*. That the second syllable of *thathikā* is *thi* instead of *ti* or *tti* is possibly due to a clerical error. In the dialect of Chamba again the word is pronounced *thatī*.

TRANSCRIPT.

ओं[1] सत्यं प्रमाणम्

ओं स्वस्तिः ॥ राम-राम-राम-पराक्रम-पराक्रमण-दक्ष-दक्षजाकांत-[l. 2] नितांत चरण-शरण-कृतांतःकरण-रणविशारद-शारद-हिम[कर*][2]-करान्-[l. 3] कारि यशः-पूर-पूरित-दिगंतर-परमभट्टारक-महाराजाधिराज-श्री-ब[l. 4]हादरसिंह-देवपादाः ॥ ॥ महाराज्ञी युवराज-प्रतापसिंहः महामंत्रि[l. 5]वर-नारायणसिंहः ॥ ॥ श्री-चंपक-पुर-स्थ-महापंडित-रमापतये । पंडित-स[l. 6]रानंद-पुत्राय त्रिकुलनिर्मलाय त्रिसंध्योपासकाय षट्कर्मरताय स्वकर-कमल[l. 7]चिर्चितं विचित्र प्रसादभूमि-पत्रं समर्पयंति । तत्र च भूमि-बीजभरणादि वर । आदौ-[l. 8]ज-सुन-नाम-राज-दुहितुः पाणिग्रहण-समये पुलस्त्याश्रम-निकटाद्बीज-प्रस्थ-त्रिंशतिः गगा-नाम-राज-[l. 9] दुहितुः विवाह-समये । हट्ट-ग्राम-समीपाद्बीज-प्रस्थ-त्रिंशतिः रगां नाम-राजदुहितुः विवाहे मौरीस्था-वर-[l. 10]मध्याद्बीज-प्रस्थ-त्रिंशतिः[3]। सर्व कुंकुम-भूमि-बीज-भरणादि[4]-वरमेकं प्रसादी-कृत दत्तम ॥ ॥ द्रंगांतरात्[5] । पुरुक-[l. 11]भभोकयोः हट्टमेकम् । शयन-बन्धन-शयिका परमश्रेष्ठा एका । एतत्सर्व गुरुदक्षिणार्थं श्री-बहादरसिंह-राज्ञा र[l. 12]मापतये पंडिताय प्रसादीकृत दत्त । तदनेन ससंतानेना-चन्द्र-सूर्यमण्डल-ध्रुवमण्डल-ब्रह्माण्ड-स्थिति-प[l. 13]र्यंतमुपभुजनीयम्[7] ॥ ॥ योऽस्या-पहर्ता स दंड्यो वध्यो नरकपाती स्यात् ॥ तत्र स्मृतिश्लोकाः ॥ ॥ श्वानो द्वादश जन्मा[l. 14]नि । दश जन्मानि सूकरः । कुष्ठी द्वादश जन्मानि । स्वयं-दत्तापहारकः[8] ॥ सुरात्राण-राज-दुहितु[9]-विवाह-समये । एको[l. 15] महाश्वेन एकं शेटकं कुंकुम[10] च सकल्पितं तत्र रमापति तत्पुत्रादयो यदायान्ति तदानीमेव वर्षे वर्षे देयं ॥ ॥ [l. 16]सुवर्णमेकं गामेकां भूमेरप्येकमंगुलं[11] । हरन्नरकमाप्नोति याव-दिंद्राश्चतुर्दश[12] सं ३५ कार्त्तिक[13] सु ति ११ ॥ [l. 17]साधारणो[14] धर्मसेतुर्नराणां काले काले पालनीयो भवद्भिः । सर्वानेतान्भाविनो पार्थिवेन्द्रान्भूयो भूयो याचते रामचंद्रः ॥ ॥ [l. 18] विवाहात्प्रवर्तन[15] भूमेर्मौल्यं ब[l. 19]हादरसिंह-राज्ञा दत्तं[16] सा भूमिः[17] [l. 20] पुनः संकल्पदत्ता[18] रमापतये । लिखितं महापंडित-कर्पूरेण श्री[19]

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1 Expressed by a symbol.

2 Restored from analogous passages in Chambā copper-plates.

3 The *visarga* is omitted in the original.

4 In the original there is an *anusvāra* over *ṇā*. Possibly it belongs to the next syllable.

5 The *anusvāra* over *gā* has been omitted in the original.

6 The *anusvāra* over *pa* has been omitted in the original.

7 The ungrammatical form *upabhuñjanīyam* occurs already in the Chambā copper-plates.

8 The original has *svayaṁdatapahārakaḥ*.

9 The original has *duhitur*.

10 The correct construction would be *ekaṁ kuṅkumaśetakaṁ*.

11 The original has *bhūmir*.

12 The *anusvāra* over *di* has been omitted in the original. After *caturdaśa* it has a *visarga*.

13 The original has *Karttika*, followed by a vertical stroke.

14 The original has *śādhāro yaṁ*.

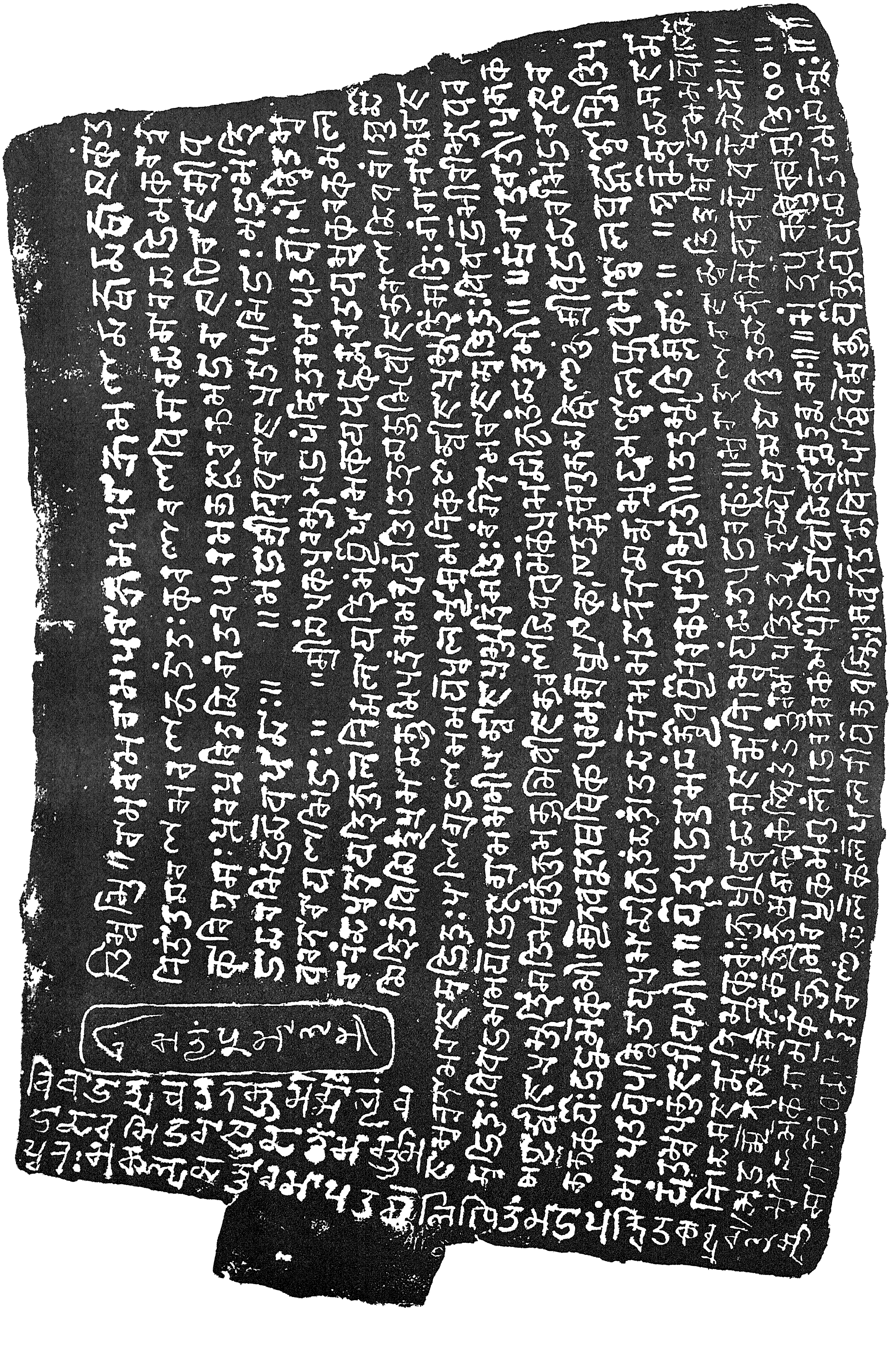
15 The original has *parvatana*, a form evidently due to vernacular influence: *cf.* the words *parja* (Skr. [illegible]), *parviṣta* (Skr. *pravista*), etc.

16 The original seems to have *dātaṁ*, but the second *aksara* is slightly damaged.

17 The *visarga* is omitted in the original.

18 The form *saṁkalpadattā* corresponds with the vernacular *saṁkalp dittā*. The meaning of *saṁkalp* is "a donation, a grant."

19 The last three words obviously belong to the original inscription, but lines 18-19 and the first part of 20 appear to have been added afterwards.



COPPER-PLATE GRANT OF BAHĀDUR SINGH OF KULLŪ.

TRANSLATION.

True warrant.

Oṁ hail! He of the valour of the three Rāmas,[1] dexterous in attacking the enemy; he, whose heart has taken refuge at the lofty feet of the Beloved of Dakṣa's daughter;[2] he, who is experienced in warfare and with the fulness of his glory, imitative [of the rays] of the autumnal moon, has filled the Universe; the supreme prince, the king of kings, the illustrious lord, His Highness Bahādur Siṅgh; the very illustrious heir-apparent Pratāp Siṅgh [and] the excellent prime-minister Nārāyaṇ Siṅgh offer to the great Paṇḍit Ramāpati, the son of Paṇḍit Surānand, who resides in the illustrious town of Chambā, the spotless descendant of three houses, who worships at the three divisions of the day [3] and delights in the six duties [4] [as a token] of their favour an ornamental charter [recording a grant] of land [and] adorned with their own lotus-like hands [5] and thereby a gift of land, with [its] seed-corn, rent [6] and so forth. He has been favoured and presented at the time of the marriage of the Rājā's first-born daughter, Sunu by name, with [a field requiring] thirty *pathās* of seed-corn, situated in the neighbourhood of Pulastya's hermitage. At the time of the wedding of the Rājā's daughter, Gaṅgā by name, with [a field requiring] thirty *pathā* of seed-corn in the vicinity of the village of Hāṭ [and] at the wedding of the Rājā's daughter, Raṅgo by name, with [a field requiring] thirty *pathās* of seed-corn on Sīrī Hill, altogether a gift of saffron-fields with [their] seed-corn, rent and so forth. [Further] a shop [kept by] Puru and Bhabho,[7] inside the frontier-fort, and a most excellent triangular net (*thāṭī*) for catching hawks. With all this as a *gurudakṣiṇā* has Paṇḍit Ramāpati been favoured and presented by the Rājā, the illustrious Bahādur Siṅgh. It should be enjoyed by him and his offspring for as long as the moon, the sun, the polar star and the earth shall endure.

He who confiscates it is to be chastised and killed, and will go down to hell. The following are verses from the law-books: "He who confiscates what he himself has given will be a blind man for twelve existences, a hog for ten existences [and] a leper for twelve existences." At the time of the marriage of Rājā Sultān's daughters a large hawk and a *ser* of saffron has been presented [to the grantee], and this is to be given every year at that very time when Ramāpati or his descendants come [to Kuḷḷū]. "He who takes away one gold piece, one cow or one inch of land, will go to hell for as long as the fourteen Indras exist." Anno 35, [the month of] Kārtika, the bright fortnight, the lunar day 11. "The common law of men, firm like an embankment, should be guarded by you at any time; [this] Rāmacandra enjoins again and again upon all future princes." Rājā Bahādur Siṅgh has given to Ramāpati the price of the land granted on occasion of the wedding,[8] and has again presented him with the land.

Written by the great Paṇḍit Karpūra. Bliss.

J. PH. VOGEL.

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1 Balarāma, Paraśurāma and Rāmacandra.

2 Dakṣa's daughter is Pārvatī; her beloved is Siva.

3 Dawn, noon and sunset.

4 Studying (*adhyayana*), teaching (*adhyāpana*), sacrificing (*yajana*), sacrificing for others (*yājana*), giving (*dāna*) and receiving (*pratigraha*) are the six duties of a Brāhman.

5 Provided with their signature.

6 It is difficult to decide, which exact meaning is to be assigned to the word *bharaṇa*, either "the rent to be paid by the farmers to the landowner" or "the tribute to be paid to the king" or perhaps "the produce of the land."

7 The words *Puruka* and *Bhabhoka* I presume to be sanskritised proper names.

8 The literal meaning of *vivāhāt pravartana-bhūmer* (if the emendation be correct) would be "of the land coming forth from the wedding."

INSCRIPTIONS IN THE TRICHINOPOLY CAVE.

THE monolithic cave on the Trichinopoly rock contains a number of inscriptions most of which were, until quite recently, covered either partly or wholly by brick walls built by the authorities of the Mātṛbhūtēśvara temple, in order to convert the cave into a room. When Dr. Hultzsch visited Trichinopoly in December 1887, the long Tamil inscription on the back wall of the cave[1] and a Sanskṛt record on one of the pillars forming part of its west wall were the only ones that were completely visible. From a study of the latter Dr. Hultzsch concluded that the other pillar which forms part of the same wall, and which was then covered by a modern brick wall, must also have been engraved. The temple authorities temporarily removed this wall at the request of the Collector, Mr. W. A. Willock.[2] Thus complete copies of the two pillars were obtained, and the texts and translations of the Pallava inscriptions which they contain[3] were published by Dr. Hultzsch first in *Epigraphia Indica*, Vol. I, and subsequently in his *South-Indian Inscriptions*, Vol. I. A photolithograph of one of the two pillars has also been issued with *South-Indian Inscriptions*, Vol. II, Part III, Plate X, facing page 340. They belong to the time of the Pallava king Mahēndravarman I., who must have flourished about the beginning of the 7th century A.D.,[4] and record that he excavated the cave and set up a *liṅga* of Śiva in it.

The complete removal of the brick walls, which has recently been carried out at the instance of the Director-General of Archæology, has disclosed inscriptions on (1) the pillar forming part of the west wall, containing one of the Pallava inscriptions already published by Dr. Hultzsch and a damaged Tamil record which will be noticed in the sequel; (2) on the outer row of four pillars; (3) on the pillars (forming part of the wall) next to the *dvārapālakas* on each side of the shrine which faces the west; and (4) on the portion of the rock next to the shrine (on its right side) at the entrance into

[1] Of this he has remarked in his *Progress Report* (G. O. No. 424, Public, dated 20th April 1888, paragraph 12) that it is a " much defaced inscription in old Tamil " and contains neither a king's name nor a date. From a fresh impression made last year, I am able to add that it consists of 104 long lines engraved in two sections (the first in 56 lines and the second in 48) containing " one hundred (verses in the) *Ka[ḻ]tturai* (metre) " in praise of the rock, called Śirāmalai in every one of them.

[2] *South-Indian Inscriptions*, Vol. I, p. 28 f.

[3] The mutilated Tamil inscription which is found at the bottom of one of the two pillars hasnot been published, but is noticed later on in this paper.

[4] *Bombay Gazetteer*, Vol. I, Part II, p. 323.

the cave. In (3) more than one-half of the inscription on the right pillar, which contains the beginning, is damaged. The preserved portion contains the following *birudas :* Mahēndravikramaḥ, Mattavilāsaḥ, Mahāmēghaḥ and some unintelligible words. Of the writing which seems to have covered the whole of the left pillar, only a few letters are now visible at the top.

(2) contains the following Sanskṛt *birudas* : [Laḷi]tāṁkuraḥ, Satyasandhaḥ, Saṁkīrṇṇajātiḥ, Abhimukhaḥ, Akaruṇaḥ, Anityarāga[ḥ], Anumānaḥ, Avanibhājana[ḥ], Virasaḥ, Vyavasthitaḥ, Vyavasāyaḥ, Nityavinītaḥ, Nirapēkṣaḥ and Naihikāmutrikaḥ. Of these, Avanibhājana occurs also in the Śīyamaṅgalam cave ;[1] Laḷitāṁkura in the same, as well as in the Vallam cave ;[2] and Satyasandha in the Trichinopoly cave inscriptions already published.[3] All these three are known as *birudas* of the Pallava king Mahēndravarman I. It may, therefore, be concluded that the other *birudas* mentioned above, as well as those to be noted presently, belong to him. The non-Sanskṛt portion (which is mixed up with the *birudas* mentioned above) on these four pillars consists of a number of unintelligible words[4]—apparently in Telugu, to judge from the endings—in the same alphabet as the Sanskṛt *birudas.* The bottom of each of these four pillars contained a Tamil *biruda* in the Pallava-Tamil character, of which only two are preserved in full, *viz.*, Piṇapiṇakku (3rd pillar from the west) and Kuśaññāṉ (4th pillar). Thus the practice of registering on stone the reigning king's *birudas*, which we find on a large scale in the Kailāsanātha temple at Conjeeveram[5] and in the Seven Pagodas,[6] appears to have been started already during the time of Mahēndravarman I. In addition to these, the 3rd pillar from the west contains a partly damaged Tamil inscription of the 16th year of the Cōla king Rājarājakēsarivarman (*i.e.*, Rājarāja I.) corresponding to A.D. 1000—1. It mentions (the temple called) Tiruccirāppaḷ[i] in (the city of) Śiṟṟamba[l], and records the sale of some waste land to a person who bore the surname Vikramaśiṅga-Mūvēndavēḷāṉ. The land granted was situated in Ālaṅguḍi, a village in Viḷattūr-nāḍu.

The Tamil record mentioned in (1) above belongs to the reign[7] of the Pāṇḍya king Māṟañ[jaḍaiyaṉ] and mentions [Tiru]malai-Perumāṉaḍigaḷ in line 4 and the Pāṇḍyādhipati Varagu[ṇa] in line 5. But as it is considerably damaged, I have decided not to print a conjectural text of it. (4) is mutilated on the right side, but as the letters which have disappeared in each line are only a few, which can be restored without much doubt, a transcript and translation of the inscription are added at the end of this article. It consists of 30 lines of writing, of which the first eight contain, in addition to the opening words *svasti śrī*, a Sanskṛt verse in Grantha characters in invocation of the god Śiva. The remaining 22 lines are in the Tamil language and character interspersed with a few Sanskṛt words in the Grantha alphabet. It is interesting to note that the *puḷḷi*

[1] *Ep. Ind.*, Vol. VI, p. 320.

[2] *South-Ind. Inscrs.*, Vol. II, Part III, p. 341.

[3] *Ibid.*, Vol. I, p. 29.

[4] It looks as if (2) was a continuation of (3). If the latter had been preserved in full, I think it would be possible to explain the unintelligible words. The meanings of some of them can be ascertained. But I have not yet succeeded in making out their collective bearing.

[5] *South-Ind. Inscrs.*, Vol. I, pp. 14 to 18.

[6] *Ibid.*, pp. 2 to 4.

[7] The actual date is some year opposite to the fourth. The spot on the original where the former was entered is damaged.

corresponding to the Sanskṛt *virāma*, which is conspicuous by its absence in later Tamil inscriptions, is employed in a number of cases, though not throughout the Tamil passage. It is denoted by a dot placed above the top of the letter to which it belongs. Two forms of the letter *ṉ* are used. The archaic form is less frequent than that in which the central loop is fully developed. The *ṟo* in *nūṟṟ-oṉṟu*(l. 10) is denoted by three distinct symbols (*e*, *ṟ* and *ā*) instead of two (*e* and *ṟā*) as in later inscriptions and the modern Tamil alphabet.[1]

The inscription belongs to the time of king Māṟañjaḍaiyaṉ (l. 8 f.), evidently another name of the Pāṇḍya king Varaguṇadēva (l. 13), who was an ornament of both the lunar and the solar race, destroyed the fortifications of Vēmbil and was staying at Niyamam. The date of the grant is "the fourth year (and) the [two] thousand-five-hundred-and-first day." This method of expressing the date is similar to that adopted in the Tiruppūvaṇam plates of the Pāṇḍya king Jaṭāvarman Kulaśēkhara[2] and has evidently to be explained in the same way. Accordingly, we get the 11th year.[3] The king made a donation of 125 *kaḻañju* of gold to the shrine of Śiva in the cave called Tirumalai-Bhaṭāra (l. 13). From the interest accruing out of this endowment had to be met the expenses for burning four perpetual lamps and five other lamps. The latter had to be kept burning the whole night on the day of the *nakṣatra* Ārdrā every month. The money was entrusted to the citizens of Śiṟṟambar, while the governor (pati ?) of Śiṟṟambar and his subordinates were to see to the proper administration of the endowment, and all Śaivas were to "protect" the grant.

The invocation to Śiva with which the inscription opens may be taken to show that king Varaguṇa was an adherent of the Śaiva creed. The statement that he was an ornament of the lunar and the solar race implies that his mother belonged to the Cōḷa family, which claimed descent from the sun, because, as a Pāṇḍya, his father must have belonged to the lunar race. It may, therefore, be concluded that Varaguṇa's father, whose name is now unknown, married a Cōḷa princess. That Varaguṇa's inscription is found in Trichinopoly shows that he must have been actually in possession of the Cōḷa country, either by inheritance or by conquest. The city Vēmbil, whose fortifications he seems to have destroyed, I am unable to identify at present, but Niyamam where he was apparently staying at the time of the grant, is very probably identical with the village of the same name in the Tanjore district.[4] At Tillasthānam, near Tiruvaiyāṟu, in the Tanjore district, is an inscription of Māṟañjaḍaiyaṉ, which records a gift for the merit of Varaguṇa-Mahārāja.[5] Evidently this has also to be assigned to the reign of the Pāṇḍya king Varaguṇa. The Pāṇḍya occupation of the

[1] Compare Dr. Hultzsch's remarks on the alphabet of the Tiruvallam inscription of the Gaṅga-Pallava king Vijaya-Nandivikramavarman (*South-Ind. Inscrs.*, Vol. III, Part I, p. 90).

[2] *Ind. Ant.*, Vol. XX, p. 288 f.

[3] Literally, it is the 341st day after the 10th year. This is obtained by dividing 2501 by 360 which gives 6 years and 341 days. These 6 years have to be added to the 4th year. The second figure in these double dates, which are frequently met with in Pāṇḍya inscriptions, has been taken to refer to the actual reign of the king and the first either to his appointment as heir-apparent or to some other event prior to the coronation.

[4] That Niyamam was a place of some importance even in later times is shown by the Tanjore inscriptions of the Cōḷa king Rājarāja I., which mention four temples at the place and refer to a quarter of it called Āyirattaḷi, *i.e.*, "the thousand temples." The modern village bearing the name Niyamam is situated close to Palamāṉēri and contains a temple called Airāvatēśvara, which bears a number of Cōḷa inscriptions. Excavation in its vicinity may yield valuable results in the shape of ancient Pāṇḍya and Cōḷa inscriptions and perhaps also of temples and *maṇḍapas*.

[5] No. 51 of the Government Epigraphist's collection for 1895.

Cōḷa country is thus established beyond all reasonable doubt. Further, an unpublished Vaṭṭeḻuttu inscription recently discovered in the Ericca-Uḍaiyār temple at Ambāsamudram, in the Tinnevelly district, is dated during the reign of Varaguṇa-Mahārāja and refers to his camp at Araiśūr in Toṇḍai-nāḍu, *i.e.*, the ancient Pallava dominions. This would show that the Pāṇḍya king had also advanced further north than Trichinopoly.

Pāṇḍya ascendancy and their occupation of the Cōḷa country is also hinted in the Udayendiram plates of the Gaṅga-Bāṇa king, Pṛthivīpati II. Here we are told that the Gaṅga king Pṛthivīpati I., who was a contemporary of the Rāṣṭrakūṭa king Amōghavarṣa I. (A.D. 814-15 to 877-78), lost his life at Śrīpuṟambiya in a battle with the Pāṇḍya king Varaguṇa. Śrīpuṟambiya has been identified with Tiruppirambiyam near Kumbhakōṇam in the Tanjore district.[1] It may, therefore, be concluded that, either as a friend or as a foe, the Pāṇḍya king Varaguṇa was in Cōḷa territory to fight against the Western Gaṅga king Pṛthivīpati I. How it was that the Gaṅgas of Gaṅgavāḍi in the Mysore State managed to get so far south as Kumbhakōṇam in the Tanjore district, and why the Pāṇḍya king Varaguṇa had to fight against them, are points on which no information is at present forthcoming. But the fact mentioned in the Udayēndiram grant enables us to fix the middle of the 9th century A.D. as the approximate period of Varaguṇa.

Further evidence of the Pāṇḍya dominion about the time of Varaguṇa is furnished by the Singhalese chronicle *Mahawansa*.[2] Here we are told that during the time of the Ceylon king Sena I., or Silamegha Sena, who reigned from A.D. 846 to 866, the Pāṇḍya king invaded Ceylon. The invasion seems to have been unprovoked, and the Singhalese troops were completely routed in more than one battle. The victor took "all the precious things in the king's treasury and likewise also of the things in the city and in the *viharas*. All the jewels that were in the king's palace, the golden image of the Teacher and the two eyes of precious stones of the stone statue of the Sage, the golden covering of the Thūpārāma Cetiya and the golden images that were enshrined in the different *viharas*; all these he took away and made Laṅkā of no value whatsoever; and the beautiful city he left desolate even as if it had been laid waste by evil spirits."

Epigraphical evidence of Pāṇḍya ascendancy prior to the time of Varaguṇa-Pāṇḍya seems to be furnished by four pillars now set up in the Sundarēśvara temple at Śendalai, near Tirukkāṭṭuppaḷḷi in the Tanjore district. They contain a number of Tamil verses in praise of the Pāṇḍya king Perumbiḍugu Muttaraiyaṉ *alias* Śuvaraṉ Māṟaṉ, son of Iḷaṅgōvadiyaraiyaṉ *alias* Māṟaṉ Paramēśvaraṉ, and grandson of [Perumbi]ḍugu Muttaraiyaṉ *alias* Kuvāvaṉ Māṟaṉ. One of the pillars records the building of a temple of the goddess Piḍāri by Śuvaraṉ Māṟaṉ.[3] Later inscriptions found on these pillars show that this temple was built at Niyamam[4]—evidently the same as the village mentioned in the subjoined inscription, as the place where Varaguṇa was staying. From the fact that these Pāṇḍya inscriptions are found near Tanjore, which is situated in the heart of the Cōḷa country, it may be concluded that the Pāṇḍya king Śuvaraṉ

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[1] *South-Ind. Inscrs.*, Vol. II, Part III, p. 381.
[2] L. C. Wijesinha's *Translation*, chapter L.
[3] Government Epigraphist's *Annual Report* for 1897, paragraph 9.
[4] See the same *Report* for 1899, paragraph 22.

Māran̲ was more powerful than the Cōla and accordingly invaded and occupied the dominions of the latter.[1] At present we have no means of ascertaining the exact time when this event took place. But it may be supposed, at least tentatively, that Śuvaran̲ Māran̲ was a predecessor of Varaguṇa. This surmise is based partly on the fact that an inscription of Mārañjaḍaiyan̲—perhaps the same as Varaguṇa who is mentioned by that name in the subjoined inscription—is also found on one of the four Pāṇḍya pillars mentioned above.[2] From the place it occupies on the pillar, it may be supposed that this inscription was not the first to be engraved on it. Whether this surmise be true or not, there is not much doubt that, prior to the rise of the Cōlas under Vijayalaya towards the close of the 9th century A.D., the Pāṇḍyas had become dominant in the Tamil country, though at present it is impossible to ascertain how long their ascendancy lasted or how it was brought about. The Gaṅga-Pallavas held sway about the same time both over Toṇḍai-maṇḍalam and over the Cōla country.[3] The exact nature of the political relationship that existed between the Gaṅga-Pallavas and the Pāṇḍyas has to be determined by future researches.[4]

Traditional accounts of Pāṇḍya history mention only one Varaguṇa, and state that he united the Cōla- and Toṇḍa-maṇḍalam to the Pāṇḍya kingdom. "Chola was about to attack the Pāṇḍiyan̲, but Varaguṇa made a counter-attack and drove him far into his own country. Bhadra[6] was sent to the Chēra king, who was directed to give him valuable presents, which was done; implying that Chēra was subsidiary to the Pāṇḍiyan̲."[7] This event is also referred to in the Tamil work *Periyapurāṇam* in the chapter which gives an account of the Cēra king Cēramān̲ Perumāḷ. But the name of the Pāṇḍya king Varaguṇa is not mentioned here. Consequently, it is doubtful if the former was a contemporary of the latter. The same Tamil work refers to an intermarriage between the Cōlas and Pāṇḍyas during the time of the Śaiva devotee Sundaramūrti-Nāyan̲ār. It is said that the Cōla king had married a Pāṇḍya princess and was staying at Madura. This intermarriage must be different from the one implied in the Trichinopoly inscription, where it must have been a Cōla princess that married a Pāṇḍya king. The Cēra king (Cēramān̲ Perumāḷ Nāyan̲ār) is also reported to have been at Madura at the time in company with Sundaramūrti-Nāyan̲ār. As both the Cōḷa and the Cēra kings were at Madura at the time, the Pāṇḍya king must have been the most powerful of the three. In case the period when this happened is different from that of Varaguṇa-Pāṇḍya and of his father, as well as that of Śuvaran̲ Māran̲ mentioned in the Śendalai pillars, it becomes evident that Pāṇḍya ascendancy lasted at least three generations, either consecutively or otherwise.

The modern Anglo-Indian name Trichinopoly is derived from Tiruccirāppaḷi,[8]

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[1] Government Epigraphist's *Annual Report* for 1899, paragraph 20.

[2] *Ibid.*, paragraph 21.

[3] The same *Report* for 1904, paragraph 13.

[4] According to the unpublished Bāhūr plates, the Gaṅga-Pallava king Nṛpatuṅga helped the Pāṇḍyas against some enemy whose name is not mentioned.

[5] Mr. Sewell's *Lists of Antiquities*, Vol. II, pp. 214 to 220; Sir Walter Elliot's *Coins of Southern India*, pp. 128-129.

[6] This is the name of the musician Bāṇa-Bhadra, who was a contemporary of the Cēra king Cēramān̲ Perumāḷ, and of the Śaiva devotee Sundaramūrti Nāyan̲ār.

[7] Mr. Sewell's *Lists of Antiquities*, Vol. II, p. 215; *Ind. Ant.*, Vol. XXII, p. 63.

[8] Tiruccirāppaḷḷi is the form which occurs in the *Periyapurāṇam.*

which appears to have denoted the shrine in the cave during the time of the Cōḷa king Rājarāja I. The more ancient name of the shrine occurring in the subjoined inscription is Tirumal[ai]-Bhaṭārar,[1] which shows that Tirumalai, 'the sacred hill,' was the name of the rock at the time. It was apparently called Śirāmalai in later times, and this is the form to which the modern name of the town has ultimately to be traced. The town, which is now called after the shrine in the cave, seems to have been known as "the city of Śiṟṟambar" in ancient times, and it is interesting to note that it was a "city" already in the 9th century. The name Śiṟṟambar may still survive in some suburb or outlying village of Trichinopoly, but I have not been able to trace it.

TEXT.

1. Svasti śri [II*] Ka-
2. lp-āpāya-hutāśa-dhū-
3. ma-paṭala-krūram viṣaṁ līla-
4. yā kaṇṭhē yaḥ kalayāmbabhūva [vi]-
5. budhai[r]=bibhyatbhir[2]=abhya[r]tthitaḥ [1*] ya[s=tā-*]
6. [r]ṇīr=iva nirddadāha vitatīś=śuṣkāḥ purī-
7. r=āsurīr=yyaś=c=ākṣi-jvalanē juhāva
8. Madanam pāyād=apāyāt=sa vaḥ [||*] Kō Māṟa[ñ*]-
9. ja[ḍ]aiyarku yāṇḍu nāṉgu nāl[3] i[r-ā]-
10. yiratt-ainnūṟṟ-oṉṟu Vēmbil-[ma]di[l=a]-
11. ḻittu=ppōndu Niyamatt=irund=aruḷi [Sō*]-
12. ma-Sūryy-ānvaya-dvaya-tilak-āraṁgārar[4]=āyina [Pā*]-
13. ṇḍyādhirājar Varaguṇadēvar Tirumal[ai]-Bhaṭāra[rk*]-
14. ku=kkuḍutta poṉ pāḍi-kkallāl 125 m[5] nūṟṟ-[i]-
15. [6] [ru]batt-aiṅ=gaḻañjum [1*] i=ppoṉ muda=ṉiṟka
16. poli koṇḍu muppadiṉ kaḻañju poṉṉiṉ
17. poliyāl oru-nondāviḷakk=āga nūṟṟ-iru-
18. badiṉ kaḻañju poṉṉāl nālu non-
19. dāviḷakk=eriya=kkāṇa-nāḻiyāl niśadi aṭṭakka-
20. ḍava ney iru-nāḻi [1*] niṉṟa aiṅ=gaḻañju p[o]-
21. ṉṉālun=diṅgaḍōṟum tiṅga=ṭṭiruvā[d]i-
22. rai nāṉṟ=[a]vv-irā=ppularum=aḻavum aindu
23. viḷakk=eriya aṭṭakkaḍava ney iru-nāḻi-u-
24. ri [1*] ivv-oṭṭiṉa pariśu ney aṭṭi i-tti-
25. ruviḷakk=erippāṉ i-ppoṉ nūṟṟ-irubatt-ai-
26. ṅ=gaḻañjuṅ=goṇḍōm Śiṟṟambar naga[rat*]-
27. tōm [1*] ivv-oṭṭiṉa pariśu ney aṭṭuvip[pa*]-
28. daṟku amaindu puṇaippaṭṭōm Śiṟṟambar [pa*]-
29. di[yu]m pādamūlattōmum [1*] idu pan-māhē-
30. śvarar irakṣai [||*]

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[1] In the damaged inscription of Māṟañjaḍaiyaṉ, the form [Tiru]malai-Perumāṉaḍigal occurs: see page 271, above.

[2] Read =*bibhyadbhir*=.

[3] Read *ir-āyiratt-*.

[4] Read -*alaṁkārar*=.

[5] This is the abbreviation for *kaḻañju*.

[6] The letter *ru* is corrected from *i*.

Translation.

Hail! Prosperity!

May he (*i.e.*, Śiva) protect you from danger—who, at the request of the frightened gods, playfully deposited in his throat the poison [1] (which was as) fierce as the dense smoke (arising) from the fire at the destruction of the world; who burnt the (three) cities of the demons as (if they had been) heaps of dry grass; and who offered as an oblation Madana (Cupid) in the fire of (his third) eye.

(L. 8) In the fourth year (and) the [two] thousand five hundred and first day (*of the reign*) of king Māṟañjaḍaiyaṉ. —Having destroyed the fortifications of Vēmbil, and having advanced (from that place) and being pleased to stop at Niyamam, Varaguṇadēva, the Pāṇḍyādhirāja, who was the ornament (*i.e.*) the forehead mark of both the lunar and the solar race, gave to the god (*bhaṭāra*) of Tirumal[ai] 125 *ma*—one hundred and twenty-five *kaḻañju*—of gold (weighed) by the standard of the district (*pāḍi-kkal*).

(L. 15.) From the interest of this gold (to be invested) as capital,—two *nāḻi* of ghee have to be poured out every day by the (measure called) *kāṇa-nāḻi* in order to burn four perpetual lamps from (the interest of) one hundred and twenty *kaḻañju* of gold—at the rate of one perpetual lamp from the interest of thirty *kaḻañju*.

(L. 20.) From the remaining five *kaḻañju* of gold, two *nāḻi* and (one) *uri* of ghee have to be poured out every month in order to burn five lamps throughout the night on the day of (*the nakṣatra*) Ārdrā (*Tiruvādirai*) in (every) month.

(L. 24.) We, the citizens of Śiṟṟambar, received these one hundred and twenty-five *kaḻañju* of gold for burning these sacred lamps by pouring out ghee as agreed upon thus.

(L. 27.) We, the chief (*pati*) of Śiṟṟambar and (his) servants, consented to become security [2] for causing the ghee to be poured out as agreed upon above.

(L. 29.) This (gift is placed under) the protection of all *Māhēśvaras*.

V. VENKAYYA.

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[1] This is the black *kālakūṭa* poison produced at the churning of the milk ocean.

[2] The verb *puṇaippaḍu* is used in this sense in a Mēlpāḍi inscription, *South-Ind. Inscrs.*, Vol. III, Part I, p 28.

INSCRIPTIONS FROM GWĀLIOR.

IN December 1903, I was deputed by Mr. Marshall to Gwālior to inspect the inscriptions placed in the State Museum of His Highness the Mahārāja Scindhia. There I noticed five[1] inscriptions which, as far as I know, have not yet been edited. Reserving a full account of them all for some future occasion, I propose to give here a synopsis of the five, together with the text and translation of one of them.

I.—An Undated Praśasti of the reign of Bhojadeva.

The stone which bears this inscription is said to have been found a few years ago at Sāgar-Tāl in the Gird Gwālior district about half a mile west of Gwālior town. The inscription consists of seventeen lines which cover a space of about 3′ 5″ broad by 1′ 2″ high or nearly one-half of the stone. A raised edge going all the way round the slab indicates that the entire surface was intended to be engraved. Perhaps something else—though very little—was meant to be written on the blank portion but was left out for some reason or other. Up to the twelfth line the stone-mason did his work with great care, neatness and artistic finish. After that the engraving is imperfectly executed. Line 5 has lost three letters at the end. A few *akṣaras* here and there are very slightly damaged but can be easily restored. On the whole the inscription is well preserved.

The character is the type of script current in Northern and Western India during the ninth century of the Christian era. It is similar to the Dighwa-Dubauli plate,[2] but resembles most closely that of the Pehevā grant[3] of Mahendrapāla. The manner of writing, the ornamentation of the superscribed *mātrās* and the tails of some letters are quite similar in both. The *praśasti* is said to have been composed by a person called Bālāditya (verse 27). The language is good Sanskrit of the Kāvya style and, except the introductory *oṁ namo Viṣṇave*, throughout metrical. In respect of orthography, there are few points which call for special notice. The letter *b* is throughout denoted by the sign for *v*, *e.g.*, in *vimva cumvi*, line 1. The elision of *visarga* not warranted

[1] There are three more which consist only of a few letters scratched on the capitals of miniature pillars.

[2] *Ind. Ant.*, XV, p. 112.

[3] Bühler, *Epig. Ind*, I, p. 244.

by the canons of Pāṇini is also to be noticed as in *saṅgata kīrttidārais*, line 9. Before *r*, *t* has been doubled; for instance in *ttrijagadekavikāsakoṣaḥ*, line 8. Consonants immediately following *r* have frequently been reduplicated, for example, in *kīrtti*, line 9. Lastly, the vowel *ṛ* has been used in place of the syllable *ri*. Thus *priya* is written as *pṛya* in line 4.

The object of the inscription is to record (verse 25) that the pious king Bhoja erected a gyneceum—Skr. *antaḥpura*—in honour of Viṣṇu (*Narakadviṣ*) to add to the glory and religious merit of his queens.

The inscription opens with an invocation of Viṣṇu (*Narakadviṣa*), after which, by way of introduction, some illustrious scions of the solar race are named with occasional eulogies (vv. 2-3). Then Nāgabhaṭa and Kakṣuka among the more remote and Devarāja, Vatsarāja, Nāgabhaṭa and Rāma as the immediate predecessors of Bhoja are mentioned (vv. 3-14). Stanzas 8-10 extol Nāgabhaṭa, a warlike glorifier of Ikṣvāku's race, and allude to his triumph over the rulers of Andhra, Saindhava, Vidarbha and Kaliṅga. From verses 10-11 we learn that this brave monarch utterly routed the lords of Vaṅga and seized the hill fortresses of the kings of the Ānartta, Mālava, Kirāta, Turuṣka, Vatsa and Matsya countries. He had Rāma as his son (v. 12), who equalled his glorious namesake in prowess and exploits described here in ambiguous—*śliṣṭa*—expressions. Rāma's son was Mihira who, because of his extensive rule, became famous under the appellation Bhoja (from *bhuj*=possess, rule). Bhoja was illustrious, composed, adroit in extirpating evil and a staunch champion of learning. Stanzas 18-24 form an encomium of his excellences. Verse 21 asserts that he was victorious in a campaign against the king of Vaṅga and extended his conquest as far as the ocean. In the last but one verse, the poet expresses the wish for the permanence of the famous work of Bhojadeva.

The results of historical interest which can be deduced from this document are few. Nowhere in the inscription are we told even the name of the capital or the country over which Bhoja or his predecessors held sway, nor are we informed of the date of any event of his reign. What we learn is this: Bhojadeva, a scion of the solar race, descended from Saumitri—metronymic of Lakṣmaṇa—was the son of Rāma, grandson of Nāgabhaṭa, who rendered himself conspicuous by defeating the Turuṣkas and other rulers, and great-grandson of Vatsarāja. His real name was Mihira and Bhoja a *biruda*.[1]

The identity of our Bhoja with the homonymous king of the Dighwā-Dubauli plate of Mahārāja Mahendrapāla is proved by the identity of the pedigree.[2] This accounts for the close resemblance of the character of both monuments.

From the Daulatpura plate[3] we learn that Bhojadeva governed his kingdom in the year 900, while his successor Mahendrapāla is represented in the grant of Dighwā-Dubauli as ruling in the year 955. Both the dates refer to the Vikrāma[4] era and

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[1] The Daulatpura plate mentioned by Dr. Kielhorn in his list appended to *Epig. Ind.*, V, gives the same order of descent, but Prabhāsa as the surname of Bhoja—a discrepancy accounted for by the similarity of the import of both the terms Prabhāsa and Mihira.

[2] *Cf. Ind. Ant.*, XV., p. 112. *Mahārāja Śrīvatsa-rājadevas tasya putras . . . Śrī Nāgabhaṭadevas tasya putras . . . Śrī Rāmabhadradevas tasya putras . . . Śrī Bhojadevas.*

[3] Dr. Kielhorn's list, *Epig. Ind.*, V, No. 710.

[4] *Cf.* Dr. Kielhorn, *Epigraphic Notes*, in *Nachr. der K. Ges. der Wiss. zu Göttingen Phil. hist. Kl.*, 1905, Pt. 2.

correspond approximately to A.D. 843 and 898, respectively. If my identification is admitted, our *praśasti* must have been composed about the middle of the ninth century. This date allows us to identify this Bhoja also with the Bhoja of the inscriptions of Deogaṛh[1] (A.D. 862), Siyadoni[2] (*ibid.*), Gwālior[3] (A.D. 876), Pehevā[4] (A.D. 882), and with the Adhirāja Bhoja of the *Rājataraṅgiṇī* if his contemporaneity with Śaṅkaravarman (A.D. 883-901), be admitted as a fact.[5]

The proposed identification may be objected to on the ground that the Bhoja of the Dighwā-Dubauli plate is called *paramabhagavatībhakta*—a most devout worshipper of Bhagavatī—while that of our *praśasti* seems to be a worshipper of Viṣṇu. Though the argument of genealogy is sufficient to overcome this objection, there is another way also in which it can be met. We find that Bhagavatī was the tutelary deity (Skr. *kuladevatā*) of Bhoja's family.[6] It is also not impossible that, though initiated into Viṣṇuism, he was devoted to Bhagavatī on account of his natural inclination.[7] Our inscription does not call Bhoja a Vaiṣṇava. His dedication of a building to Viṣṇu might have been due to his queen's faith in that god, and the introductory invocation was a choice of the *kavi*. The prominence of *Śakti* worship in that family is evidenced by the seal of the grants of Vināyakapāla, the son of Mahendrapāla, which has an image of Bhagavatī notwithstanding the king's being a sun-worshipper.

Our Bhoja is distinct from the Pramāra or Paramāra Bhoja of Mālava who had to flee from Dhārā before Āhavamalladeva,[8] for the grand-father of our Bhoja is said to have wrested a fortress from the ruler of Mālava (verse 11), and besides, their lineage and dates are different. For similar reasons Guhilāwat Bhoja must also be a different personage.[9]

A word about the wars alluded to in the *praśasti*. Nāgabhaṭa, the grand-father of Bhoja, subdued Sind (Saindhava) and carried by assault the stronghold of the *Turuṣka* (sts. 10—11). The Turuṣkas in the inscriptions of this period are the Muhammadans. The first appearance of the crescent banner in India, according to Farishtah, was in the year of the Hijra 44 or A.D. 664-5, *i.e.*, at the time of the first Moslem expedition to Kābul,[10] though Arab descents on Sind by sea are mentioned as early as the Caliphate of 'Umar, about 15 A.H. Elphinstone, on the authority of Farishtah informs us[11] that the Muhammadans were driven out of Sind in the second century of the Hijra. As Nāgabhaṭa held sway over Sind, he must have opposed the

[1] Cunningham, *A. S. Reports*, Vol. X, p. 101.

[2] Dr. Kielhorn, *Epig. Ind.*, I, p. 173.

[3] Dr. Hultzsch, *ibid.*, p. 159.

[4] Dr. Bühler, *ibid.*, p. 186.

[5] This, however, is doubtful. *Cf.* Dr. Stein's note at *Rājat*, V, 151.—Dr. Hultzsch has suggested that Kalhaṇa's expression *bhojādhirājena* admits of the rendering 'King of the Bhojas.' *Epig. Ind.*, I, p. 155.

[6] *Cf.* Fleet, *Ind. Ant.*, Vol. XV, p. 112.

[7] Even orthodox Śāktas diametrically opposed to Vaiṣṇavas would feign Viṣṇuism—'अन्तः शाक्ताः बहिः शैवाः सभामध्ये च वैष्णवाः'

[8] Bühler does not seem to be accurate in stating, *Epig. Ind.*, I, p. 231 : '. . . who tells us in the Vikramāṅkadevacarita, I, 9—94, that Jayasiṁha's successor, Someśvara II, who ruled from about A.D. 1042-43 to 1068-69, took Dhārā by storm, etc.,' as the successor of Jayasiṁha was Āhavamalla and Someśvara II. was the hated brother and predecessor of Vikrama and eldest son of the former.

[9] Dr. Kielhorn's *List of Inscriptions of Northern India*, Nos. 57, 67, 79, and Nos. 234, 243.

[10] Briggs, *Ferishta*, Vol. I, p. 4.

[11] *History of India*, p. 307.

Muhammadans when they attacked that country and succeeded in capturing their fortresses. This must have happened about the end of the 8th century of the Christian era.

L. 1 ओम् नमो विष्णवे ॥
शेषाहितल्पधवलाधरभागभासि-
वक्षःस्थलोल्लसितकौस्तुभकान्तिशोणं ।
श्यामं वपु शशिविरोचनबिम्बचुम्बि-
व्योमप्रकाशमवतान्नरकद्विषो वः ॥ १ ॥[1]
आत्मारामफलादुपार्ज्यं विजरं दैवेन दत्यद्विषा
ज्योतिर्ब्बीजमकृत्रिमे

L. 2. गुणवति क्षेत्रे यदुप्तं पुरा [।]
श्रेयःकन्दवपुस्ततस्समभवद्भास्वानतश्चापरं
मन्विक्ष्वाकुककुस्थमूलपृथवः क्ष्मापालकल्पद्रुमाः ॥ २ ॥[2]
तेषां वंशे सुजन्मा क्रमनिहितपदे धाम्नि वज्रेषुघोरं
रामः पौलस्त्यहिन्स्रं क्षतविहितसमित्कर्म्म चक्रे पलाशैः ।
श्लाघ्य-

L. 3. स्तस्यानुजोसौ मघवमदमुषो मेघनादस्य संख्ये
सौमित्रिस्तीव्रदण्डः प्रतिहरणविधेर्यः प्रतीहार आसीत् ॥ ३ ॥[3]
तद्वन्शे प्रतिहारकेतनभृति त्रैलोक्यरक्षास्पदे
देवो नागभटः पुरातनमुनेर्म्मूर्तिर्ब्बभूवाद्भुतं ।
येनासौ सुकृतप्रमाथिबलनम्लेच्छा-

L. 4. धिपाक्षौहिणीः
क्षुन्दानस्फुरदुग्रहेतिरुचिरैर्दोर्भिश्चतुर्भिर्ब्बभौ ॥ ४ ॥[4]
भ्रातुस्तस्यात्मजोभूत्कलितकुलयशाः ख्यातकाकुस्थनामा
लोके गीतः प्रतीकप्रयवचनतया कक्कुकः क्ष्माभृदीशः ।
श्रीमानस्यानुजन्मा कुलिशधरधुरामुद्वहन्देवराजो
यन्ने च्छिन्नोरुपक्षक्षपितग-

L. 5. तिकुलं भूभृतां सन्नियन्ता ॥ ५ ॥[5]
तत्सूनुः प्राप्य राज्यं निजमुदयगिरिस्पर्द्धि भास्वत्प्रतापः
क्ष्मापालः प्रादुरासीन्नतसकलजगद्वत्सलो वत्सराजः ।
यस्यैतास्सम्पदश्च द्विरदमदसुरास्वादसान्द्रप्रमोदाः
पश्चात्क्षीराक्षिपन्त्य प्रणयिजनपरिष्वङ्गकान्ता विरेजुः ॥ ६ ॥[6]
ख्या (तादू) भाण्ड

[1] Metre, Vasantatilaka. Read *vapuḥ*.

[2] Metre, Śārdūlavikrīdita. Read *Kakutstha*.

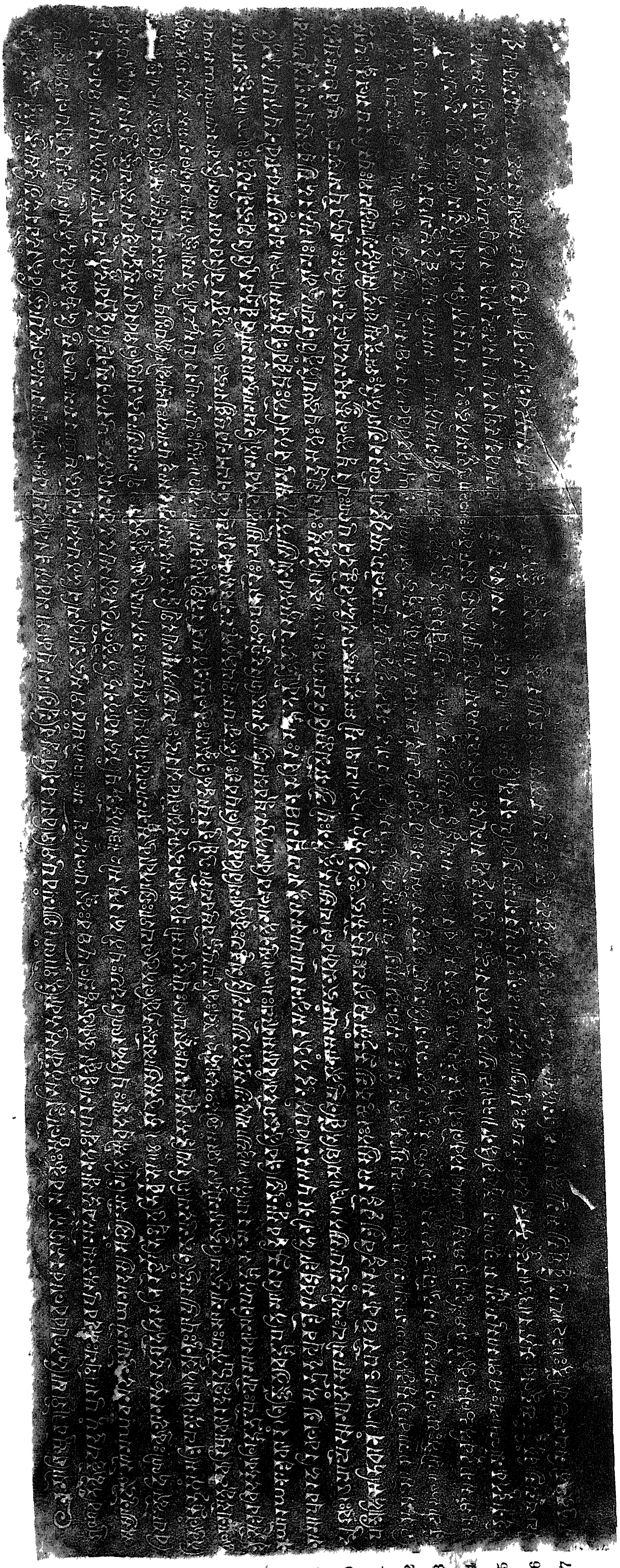
[3] Metre, Sragdharā. Read *hiṁsram*.

[4] Metre, Śārdūlavikrīdita. Read *rucirair*.

[5] Metre, Sragdharā. Read *Kākutstha* and *priya* also read *cchinno* (?)

[6] Metre, Sragdharā. Read *ksipantyaḥ*.

SĀGAR-TĀL. GWALIAR.



INSCRIPTION OF THE REIGN OF BHOJADEVA.

L. 6. कुलान्मदोत्कटकरिप्राकारदुर्ल्लंङ्घतो
य: साम्राज्यमधिज्यकार्म्मुकसखा संख्ये हठादग्रहीत् ।
एक: क्षत्रियपुङ्गवेषु च यशोगुर्व्वीन्धुरं प्रोद्वह-
न्निक्ष्वाको: कुलमुन्नतं सुचरितैश्चक्रे स्वनामाङ्कितं ॥ ७ ॥[1]
आद्य: पुमान्पुनरपि स्फुटकीर्त्तिरस्मा-
ज्जातस्स एव किल नागभटस्तदाख्य: ।
यत्रा-
L. 7. न्ध्रसैन्धवविदर्भकलिङ्गभपै:
कौमारधामनि पतङ्गसमैरपाति ॥ ८ ॥[2]
तथ्यास्पदस्य सुकृतस्य समृद्धिमिच्छु-
र्य: क्षत्रधामविधिबद्धबलिप्रबन्ध: ।
जित्वा पराश्रयकृतस्फुटनीचभावं
चक्रायुधं विनयनम्रवपुर्व्यराजत् ॥ ९ ॥
दुर्व्वारवैरिवरवारणवाजिवार-
याणौघसंघट-
L. 8. नघोरघनान्धकारं ।
निर्ज्जित्य वङ्गपतिमाविरभूद्विवस्वा-
नुद्यन्निव त्रिजगदेकविकासकोष: ॥ १० ॥
आनर्त्तमालवकिराततुरुष्कवत्स-
मत्स्यादिराजगिरिदुर्ग्गहठापहारै: ।
यस्यात्मवैभवमतीन्द्रियमाकुमार-
माविर्ब्बभूव भुवि विश्वजनीनवृत्ते: ॥ ११ ॥
तज्जन्मा राम-
L. 9. नामा प्रवरहरिबलन्यस्तभूभृत्प्रबन्धै-
राबध्नन्वाहिनीनां प्रसभमधिपतीनुद्धतक्रूरसत्वान् ।
पापाचारान्तरायप्रमथनरुचिर: सङ्गत कीर्त्तिदारै-
स्त्राता धर्म्मस्य तैस्तैस्समुचितचरितै: पूर्व्ववन्निर्ब्बभासे ॥ १२ ॥[3]
अनन्यसाधनाधीनप्रतापाक्रान्तदि-
L. 10. ङ्मुख: ।
उपायैस्सम्पदां स्वामी य: सव्रीडमुपास्यत ॥ १३ ॥[4]
अर्थिभिर्व्विनियुक्तानां सम्पदां जन्म केवलं ।
यस्याभूत्कृतिन: प्रीत्यै नात्मेच्छाविनियोगत: ॥ १४ ॥
जगद्दिदृक्षु: स विशुद्धसत्त्व:
प्रजापतित्वं विनियोक्तुकाम: ।
सुतं रहस्यव्रतसुप्रसन्ना-
त्सर्यादवा-

[1] Metre Śārdūlavikrīḍita. It is better to read *durllaṅghano*.
[2] Metre of verses 8—11, Vasantatilaka.
[3] Metre Sragdharā Read *Saṅgataḥ*.
[4] Metre of verses 13—14, Anuṣṭubh.

L. 11. पन्मिहिराभिधानं ॥ १५ ॥[1]
उपरोधैकसंरुद्धविन्ध्यवृद्धेरगस्त्यत: ।
आक्रम्य भूभृतां भोक्ता य: प्रभुर्भोज इत्यभात् ॥ १६ ॥[2]
यशस्वी शान्तात्मा जगदहितविच्छेदनिपुण:
परिष्वक्तो लक्ष्म्या न च मदकलङ्केन कलित: ।
बभूव प्रेमार्द्रो गुणिषु विषय: सूनृत-

L. 12. गिरा-
मसौ रामो वाग्रे स्वकृतिगणनायामिह विधे: ॥ १७ ॥[3]
यस्याभूत्कुलभूमिभृत्प्रमथनव्यस्तान्यसैन्याम्बुधे-
र्व्यूढावस्फुटितारिलाजनिवहान्हुत्वा प्रतापानले [।]
गुप्ता वृद्धगुणैरनन्यगतिभि: शान्तैस्सुधोद्भासिभि-
र्द्धर्म्मापत्ययश:प्रभूतिरपरा लक्ष्मी: पुनर्भू-

L. 13. र्न्वं या ॥ १८ ॥[4]
प्रीतै: पालनया तपोधनकुलै: स्नेहाद्गुरूणां गणै-
र्भक्त्या भत्यजनेन नीतिनिपुणैर्व्वृन्दैररोणां पुन: ।
विश्वेनापि यदीयमायुरमितं कर्तुं स्वजीवैषिणा
तन्निघ्ना विदधे विधातरि यथा सम्पत्परार्द्धराश्रये ॥ १९ ॥
अवितथमिदं यावद्विश्वं श्रुते-

L. 14. रनुशासना-
द्भवति फलभाक्कर्त्ता नेश: क्षितीन्द्रशतेष्वपि ।
अधरितकले: कीर्त्तेर्भर्त्तुस्सतां सुकृतैरभू-
द्विधुरितधियां सम्पद्वृद्धिर्यदस्य तदद्भुतं ॥ २० ॥[5]
यस्य वैरिबृहद्वङ्गान्दहत: कोपवह्निना ।
प्रतापादर्ण्णसां राशोन्पातुर्व्वैतृष्णमाबभौ ॥ २१ ॥[6]
कुमार इव विद्यानां

L. 15. वृन्देनाद्भुतकर्म्मणा ।
य: शशासासुरान्घोरान्स्वैणेनास्वैकवृत्तिना ॥ २२ ॥
यस्याक्षपटले राज्ञ: प्रभुत्वाद्विश्वसम्पद: ।
लिलेख मुखमालोक्य प्रातिलेख्यकरो विधि: ॥ २३ ॥
उद्दामतेज:प्रसरप्रसूता
शिखेव कीर्त्तिर्द्युमणिं विजित्य ।
जाया जगद्भर्तु-

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[1] Metre, Upajāti. [2] Metre, Anuṣṭubh. [3] Metre, Śikhariṇī.
[4] Metre of verses 18—19, Śārdūlavikrīḍita. In verse 19 read *bhṛtya* and *kartum* for *bhatya* and *kartu*.
[5] Metre, Hariṇī. [6] Metre of verses 21—23, Anuṣṭubh.

L. 16. रियाय यस्य
चित्रं त्विदं यज्जलधीन्ततार ॥ २४ ॥[1]
राज्ञा तेन स्वदेवोनां यशः पुण्याभिवृद्धये ।
अन्तःपुरपुरं नाम्ना व्यधायि नरकद्विषः ॥ २५ ॥[2]
यावन्नभः सुरसरित्प्रसरोत्तरीयं
यावत्सुदुश्चरतपःप्रभवः प्रभावः ।
सत्यञ्च यावदुपरिस्थमवत्यशेषं
तावत्पु-

L. 17. नातु जगतीमियमस्य कीर्त्तिः ॥ २६ ॥[3]
पातुर्व्विश्वस्य सम्यक्करमसुनिमतश्रेयसस्सन्विधाना-
दन्तर्वृत्तिर्व्विवेकः स्थित इव पुरतो भोजदेवस्य राज्ञः ।
विद्वद्वृन्दार्ज्जितानां फलमिव तपसां भट्टधन्नेकसूनु-
र्व्वालादित्यः प्रशस्तेः कविरिह जगता साक(?)माकल्पवृत्तेः ॥ [२७ ॥][4]

TRANSLATION.

Oṁ! Obeisance to Viṣṇu!

(Verse 1.) May the dark-coloured body of the Enemy of the demon Naraka protect you—that body which, crimson on account of the lustre of the jewel *Kaustubha* glittering on [his] breast and shining on the white lower side of his couch formed by the serpent Śeṣa, has the splendour of the sky touching the discs of the Moon and the Sun.

(2.) The Sun, the essence of the root of bliss, arose from the ever fresh seed of light, which the Foe of demons procured from the fruit of the garden of Self and in the beginning sowed in the natural field of Qualities. From him the wishing-trees, with Manu, Ikṣvāku and Kakutstha as their roots,[5] were produced in the form of kings.

(3.) In their race Viṣṇu[6] setting foot in due course Rāma of auspicious birth performed against the demons a martial deed which was mortal to Rāvaṇa and dire on account of the adamantine arrows. Saumitri, his honourable younger brother of staff severe, was the door-keeper (*pratihāra*) since he repelled [the enemies] in the battle with Meghanāda, the destroyer of Indra's pride.

(4.) In that family, which extended shelter to the triple world and bore the emblem of *Pratihāra*, the king Nāgabhaṭa appeared as an incarnation[7] of the Old Sage in a strange way. Wherefore he seemed to break up the complete armies of the kings

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1 Metre, Upajāti.
2 Metre, Anuṣṭubh.
3 Metre, Vasantatilaka. Read °*prasaro*°.
4 Metre, Sragdharā.
5 Or *mūla* may be rendered by 'principal ones.' In both cases its insertion is curious, can it be a name?
6 *Dhāma*=Viṣṇu; *cf. Mahābhārata* 13-149-36. 'गुरुर्गुरुतरोधाम सत्य सत्यपराक्रमः' Or we may construe as '*Tesām dhāmni kramanihilāpade vaṁśe*' and translate *dhāmni* and *Krama* by 'glorious' and 'Viṣṇu' respectively For *Krama* meaning Viṣṇu *cf. ibid.* 22. 'ईश्वरो . . . . क्रमः'
7 In this case the reading should be मूर्त्ति· But taking the word as it stands in the inscription, I would translate it by 'creation' and derive it from *mū*=bind.

of Mlecchas the destroyers of virtue, with four arms lustrous because of the glittering and terrible weapons.

(5.) His brother had a son who propagated the glory of his family, celebrated the name of the descendants of Kakutstha and owing to his refractory(?) but endearing words[1] was known in the world as Kakkuka, the paramount king. His illustrious younger brother was Devarāja who equalled the Wielder of the thunderbolt (Indra) in sacrifice and subdued the kings[2] (*alias* mountains) by destroying their mighty allies (*alias* wings) and checking their different movements.

(6.) Attaining the kingdom which rivalled the sun-rise mountain, his son, the king Vatsarāja, who loved the entire world he had subdued and resembled the sun in his majestic glory, revealed himself. His riches, highly fragrant by reason of the flavour of the wine of elephant ichor, shining in company of the needy and looking down upon the lotus-eyed females who appear beautiful when embraced by their lovers and are merry on account of tasting wine like rut of elephants, shone exceedingly.

(7.) He, the friend of the strung bow and hard to be overcome by reason of the rampart of the rutting elephants infuriated by wine, seized by main force the imperial sway from the famous house of Bhaṇḍi. He was unrivalled amongst the best warriors and occupying a high position of fame stamped the noble race of Ikṣvāku by virtue of exploits with his own name.

(8.) The Primeval Man was again born to him and far-famed, was called Nāgabhaṭa for his fighting with elephants. In his splendour, like that of Kumāra, the kings of Andhra, Saindhava, Vidarbha and Kaliṅga fell like moths.

(9.) He desired the diffusion of virtue, residing in the three Vedas, and according to the laws of the warriors fixed customs-duties. He appeared of humble frame, through modesty, after having defeated Cakrāyudha whose low state was manifested by his dependence on another (or others).

(10.) He revealed himself like the rising sun, the sole abode of the light of the three worlds, after having vanquished the lord of Vaṅga, who was like the dense and terrible darkness caused by the array of a flood of chariots and a multitude of horses and elephants of the irresistible enemy.

(11.) The greatness of his soul, whose way of life was beneficial to all mankind, though transcending the senses, was manifested in the world from his boyhood by his forcibly taking the hill fortresses of the rulers of Ānarta, Mālava, Kirāta, Turuṣka, Vatsa and Matsya.

(12.) Chastising mightily the cruel and arrogant commanders of the armies by orders, enforced on kings by dint of the strong cavalry, his son Rāma who had Fame for his wife destroying the obstacles of evil-doers looked bright and protected virtue. By those worthy deeds he glorified himself like his [homonymous] predecessor who killed demons and bridged over the ocean, full of horrible and ruthless monsters, by means of rocks fastened together by the army of powerful monkeys.

(13.) That Lord dominated the points of the compass by his glory, not attained by others, and was humbly waited upon by the Means of prosperity.

[1] A friend of mine would render 'by an affectionate inversion of the name.'

[2] Pun upon the words *bhūbhṛt* and *pakṣa*. The simile refers to the myth of Indra the thundergod having clipped off the wings of the mountains.

(14.) He, the successful one, prized [his] wealth only if used by the supplicant and not for the use of [satisfying] his own wishes.

(15.) He had no desire for the world and was perfectly pure ; yet with a view to become Prajāpati got a son, named Mihira, from the Sun, propitiated by his mysterious vow.

(16.) He overpowered and ruled the kings down to Agastya, who checked the rise of the Vindhya[1] by reverence [which the latter had for him] alone and [consequently] became famous [by the name of] Bhoja.

(17.) He was famous, calm, adroit in destroying calamities, embraced by Fortune, but not soiled by the stain of arrogance, tender through affection and an object of praises amongst the virtuous. He or Rāma stands foremost when Brahman counts his creation.

(18.) Lakṣmī, the source of fame, progeny, and virtue, became his own, never to woo again, as he trampled the kings of high descent, tossed the ocean of hostile forces and, offering to the fire of glory the fried grain in the form of the smashed foes, married and protected her by superior qualities which were uncommon, pure like nectar and undisturbed.

(19.) He being the most exalted asylum, all mankind placed their fortune with him, as if with the Creator, for the sake of safety—the elders and ascetics, pleased with his regard, out of affection, the servants out of devotion and the multitude of foes, well versed in politics [out of policy].

(20.) According to the injunctions of the *Śruti* this is a truism that throughout the world the doer reaps what he has sown and not his master [instead] even amongst hundreds of kings; yet it is strange that he, the lord of Fame and vanquisher of Kali, had his prosperity augmented by the merits of the virtuous whose intellect was undefiled.

(21.) The satiety of him, who burnt the Vaṅgas, his formidable enemy, by the fire of anger and drank the oceans by [his] splendour, shone on all sides.

(22.) He like Kumāra by multifarious lore and marvellous action chastised the terrific demons by a collection of amazons that lived exclusively by arms.

(23.) As he was the master of the fortunes of the universe, [his] chancellor Fate wrote in [his] chancery seeing at his face.

(24.) Fame, that had arisen like a flame from the flood of the unlimited glory and was the wife of that lord of the world, conquered the Sun and came back—it is a marvel indeed that it crossed the oceans.

(25.) That ruler for the increase of the glory and the religious merit of his consorts erected a seraglio in the name of *Narakadviṣ*.

(26.) As long as the sky has the stream of the celestial river for its upper garment, as long as the efficacy of austere asceticism lasts, as long as truth sustains all that is above, so long may this famous work of him purify the world.

(27) [Let] Bālāditya [be] with the world till the end of the *Kalpa*—he who is the author of this *Praśasti*, son of Bhaṭṭadhanneka, fruit of penance done by a collection of the wise and an embodiment[2] of the discrimination of Bhojadeva, who protected the world well by performing righteous deeds approved by Viṣṇuism.

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[1] Agastya is the canopus. The Vindhya, as the story goes, wanted to rise higher than the Sumeru, but bent down before Agastya who ordered him not to rise until he returned.

[2] Lit. *viveka*, or discrimination, which was within and stood before Bhojadeva.

II.—Inscription of the reign of Hammīradeva.

(SAṀVAT 1349.)

The inscription consists of 17 lines, which cover a space of about 1′ 6″ broad by 1′ 2½″ high. The size of the letters is from ½″ to ¾″. The characters are ordinary Nāgarī. The language is faulty Sanskrit. The first nine lines are in prose, the others in defective verse. Except for a few letters which are slightly damaged, the record is well preserved.

The inscription is dated, in line 8, on the sixth day of the bright fortnight of Māgha of the year 1349 of the Vikrama era. It tells us that a person named Mahtā Jait Siṅgh (Jait Sīha) had a tank built in a village called Chitādā when Śrī Hammīra-deva was the ruler of Śākambhara, the modern Sāmbar, a town in Rajputana. It would appear that the former was a chief belonging to the *Mohyāl* sub-division of the Brāhmans, as the epithet Mahtā is generally applied to its members.

III.—Inscription of the reign of Gaṇapati.

SAṀVAT 1350.

This inscription is incised on a stone slab measuring about 17″ square, and contains 23 lines, the last of which, written on the margin, is much shorter than the rest. The technical execution is good and the preservation fair. One letter in the second line, two in the third and fifth lines and one in the seventh and seventeenth lines are abraded. The whole of the text can, however, be restored with certainty except four or five *akṣaras* in the last line.

The characters are of the type of the ordinary northern Nāgarī alphabet. The average size of the *varṇas* is ½″. The language is Sanskrit and, except the introductory *oṁ namaḥ Śivāya* and the words expressing the date, throughout metrical. In the 10th and 13th verses one syllable has been left out most probably by the negligence of the engraver. A few inaccuracies, *e.g.*, *i* for *ī* in *vāpī* (line 18) *o* instead of *aḥ* and *āḥ* in place of *ā* in *niyojitāḥ* (line 9) may be noticed. The *o* of *prāṇebhyo priyā* is accounted for by the omission of *'pi* just noted.

The *praśasti* mentions a person named Rāṇā [1] Adhigadeva who was the godson of king Gopāla and the pious son of the wealthy and benevolent Padma of the family of Muccaka (?). He purified himself by ablutions at the confluence of the Ganges and the Yamunā, performed obsequies for the manes at Gayā and paid his debt to Gopāla-deva by noble deeds at *tīrthas* and on battle fields.

The inscription records that the Rānā built an oblong pond of pure water, to increase his spiritual merit, and a garden full of creepers and trees bearing fruits and flowers to dispel the fatigue of travellers.

In stanza 21, the Rāṇā is said to be the servant or minister (*bhṛtya*) of king Gaṇa-pati, which seems to be the real name of the ruler and Gopāladeva simply an attributive term—the *deva* or king of Gopāla [pura] or Gwālior.

[1] The *raṇaka* of the inscription is an attempt to sanskritise the word *rāṇā* though the latter is commonly rendered by Sanskrit *rājānaka*.

The date of the document is Saṁvat 1350, Wednesday of the dark fortnight of Kārttika.

The *praśasti* was composed by Jayasiṁha, a Kāyastha of the Māthura sub-caste, and engraved by Mahārāja.

IV.—Inscription of the reign of Kakkuka (?).

The inscription is engraved on a stone measuring about 21″ by 19″ and contains 24 lines. The characters are ancient Nāgarī of the North Indian type. The size of the letters is between ½″ and ¾″. The language is Sanskrit and metrical.

The document is not well preserved. Lines 7, 17-21, 23 and 24 have suffered considerably by the peeling off of the surface of the stone, so that the letters have either gone altogether or are so much injured as to be illegible.

The date of the inscription (line 1) is Saṁvat 1038 or A.D. 980—1.

The *praśasti* is a record of the construction of a pond of 'sweet water,' a well and a temple surrounded by twelve sanctuaries (lines 22-23) *mandiraṁ dvādaśamandirair vṛtam*.

V.—Inscription of the eleventh century.

This inscription consists of 38 lines which, excepting the last, which is only 12″ long, are 2′ 3″ in length. Of the first four lines large portions of the writing have considerably suffered from abrasion and almost gone altogether. The same is the case with the last line. Slight wearing away is to be noticed in other letters as well but that without rendering restoration impossible. The preservation of the rest is perfect almost throughout. The size of the *akṣaras* is between ⅝″ and 1″. The characters are Nāgarī of about the 11th century and are well shaped and skilfully engraved. The language is the high-flown figurative Sanskrit of the Kāvyas and excepting the introductory invocation, which has entirely disappeared and was probably *Oṁ namaḥ Śivāya*, throughout metrical. As regards orthography, a few facts may be noticed. The letter *b*, as is usually the case, has been denoted by the sign for *v* and the dental sibilant sometimes employed for the palatal. The letters that immediately follow *r* have been frequently doubled. Final nasal *in pausa* is almost invariably correctly expressed by the sign for *m*, whereas in a great many inscriptions it is shown as a mere *anusvāra*.

The peculiar flowery sign of interpunctuation in the commencement of the 27th line seems to divide the *praśasti* into two parts. The first and by far the larger portion records the construction of a temple of *Hara* or *Śiva*, by a renowned ascetic Pataṅgeśa by name. The second portion mentions (line 37) that a monastery (Skr. *maṭha*), temple (Skr. *devakula*), wells and five tanks were built by the same person. The inscription is not dated, unless there was a date in any part which is now effaced and illegible.

The *praśasti* is sectarian and tinged with Śivaism. Lines 7-12 praise some abbots of a lospice in a place called *śrī kadambaguhā*. Then follows an encomium of the preceptor of Pataṅgeśa whose virtues and excellences in turn are extolled (lines

18-25). Then the temple of Hara erected by the latter is described as provided with a fine spire, beautiful on all sides, white like the orb of the moon and resembling the Kailāśa Mountain. (*Suśikharam sarvataḥ sundaram indudhāmadhavalam Kailāsa-śailopamam.*) Thus the stainless fame of the founder took, as it were, shape in that temple (*asyaivāmalam=āgamat pariṇatim prāsādamūrttyā yaśaḥ*). The succeeding stanzas contain a eulogy of the other monuments built by the said *muni.*

HĪRĀNANDA.

KHAROṢṬHĪ RECORDS ON EARTHEN JARS FROM CHĀRSADA.

[The following note, which has been kindly communicated by Dr. H. Lüders, relates to three short inscriptions written in ink on some ancient *catis*, which were unearthed last year in the Pālāṭū Ḍherī at Chārsada. Hand copies of the records together with some tentative observations on them and a description of the vessels are published in the Annual Report for 1902-03, p. 163.—Ed.]

OF the three inscriptions the one marked A is in the best state of preservation. I would read it:

Sagha(1) *cadudiśe*(2) *ṣama* [*nana*](3) . . . .
. . . . [*pari*] *ga* [*ha*](4) *Charaa* [*sa*](5) *danamukha*(6) [||] .

NOTES.

(1.) As indicated by the dotted line, the tail of the *sa* is indistinct in the original. It is possible, therefore, that the true reading is *saṁgha*.

(2.) According to the tracing the lower end of the vowel-stroke seems to project a little beyond the top-line of the *śa*, and the *akṣara* might, therefore, possibly be read *śi*.

(3.) Only the first two *akṣaras* of this word are distinct. Of the third *akṣara* only the upper part is visible, closely resembling the upper part of the *na* of the last word of the inscription. The fourth *akṣara* also is quite indistinct, and, judging from the tracing alone, it might as well be *da* or *kha*, not to mention other possibilities. In transliterating it as *na* I am influenced by the similar inscription B, which in the corresponding place shows an *akṣara* that cannot be anything but *na*.

(4.) Of this word only the *ga* is quite clear. The last *akṣara*, at first sight, would seem to be *a*, but on close inspection it will be noticed that its lower end is quite different from that of the undoubted *a* of the next word. It looks as if some portion to the right of the letter had been lost, and therefore *ha* appears to me the most plausible reading. The *akṣara* before *ga* is damaged by the break of the jar both at the upper and lower end, but what has been left points decidedly to its having been *ri*. The *pa* is merely conjectural.

(5.) The *akṣaras raa* are certain. The lower portion of the *cha* is not quite distinct, and it cannot be denied that also the reading *mo* would be possible. Of the last *akṣara* the lower half seems to be entirely effaced and the upper half only faintly visible in the original, but what is visible of it in the tracing so exactly resembles the upper half of the *sa* in *sagha* as to make the reading *sa* almost certain.

(6.) The reading proposed by Dr. Vogel is evidently correct, although the last two *akṣaras* are partly mutilated.

Translation.

"The gift(1) of Charaa(2) to the congregation of the monks(3) in the four quarters(4) [being] the special property(5) [of] . . . . "

Before the word *parigaha* the name of the special sect, that received the gift, must be lost. The formula used in this inscription is found with slight variations in numerous votive inscriptions, compare, *e.g.*, the Kārlē cave inscription No. 20 (*Ep. Ind.*, Vol. VII, p. 71): *ima deyadhama* . . . . . *Māhāsaghiyānaṁ parigaho saghe cātudise dina*; Kura inscription of Toramāṇa Shāha (*Ep. Ind.*, Vol. I, p. 240): *ayaṁ puna vihārasyopakaraṇa cāturdiśe bhikṣusaṁghe parigrahe ācārya-Mahīśāsakānāṁ*; Kāman image inscription (*Ep. Ind.*, Vol. II, p. 212): *Nandikasya dānaṁ* . . . . . *Mihiravihāre ācāryyānāṁ sarvvastivādīnāṁ parigrahe*; and especially the Kharoṣṭhī inscription on the Mathurā Lion Pillar (*J. R. A. S.*, 1894, p. 534): *thuva ca sagharamo ca catudiśasa saghasa Sarvastivadana parigrahe*; (p. 538) *nisimo* . . . . *niyadido Sarvastivadana parigrahe.*

NOTES.

(1.) *Danamukha* is the nom. sg., which in the dialect of the Kharoṣṭhī inscriptions may end in *a* as well as in *o*.

(2.) *Charaa* would probably be *Kṣaraka* in Sanskrit, whereas *Moraa*, if this should be the correct reading, would correspond to Skr. *Mayūraka* or, possibly, *Mauryaka*.

(3.) As regards the spellings *sagha* and *ṣamanana* instead of *saṁgha* and *ṣamananaṁ*, it may be noted that also in the inscription on the Mathurā Lion Pillar the *anusvāra* is never written; compare *sagharamo, saghasa, Mahasaghiana, Sarvastivadana*, etc. Instead of *sagha* we should expect *saghe*, but in inscription B also the *e*-stroke seems to be wanting in the corresponding word. The word *ṣamanana* = Skr. *śramaṇānām* shows the transition of *śr* into *ṣ* frequently occurring in the dialect of the Kharoṣṭhī Manuscript Dutreuil de Rhins (*J. A.*, series IX, Vol. XII, p. 193 ff.) and also in that of the Aśoka edicts of Khālsī; the word *ṣamano, e.g.*, is found in the same form in the Manuscript, *loc. cit.* p. 249[1]).

(4.) The softening of the dental in *cadudiśe* = Skr. *caturdiśe* is found also in *madupidupuyae* in the Takht-i-Bāhi inscription (*J. A.*, series VIII, Vol. XV, p. 119), etc.

(5.) I take *parigaha* to be the nominative which in this phrase occurs also in the Kārle inscription quoted above.

Of the inscription marked B only the beginning can be made out with tolerable certainty, the rest being quite illegible. It reads:

Sa[ṁ]gha(1) *ca[tu]diśe*(2) *ṣamanana.*
. . . . . *nakaṣu*(3) . . . .

NOTES.

(1.) The sign of *anuṣvāra* is indicated by a dotted line in the tracing.

[1] *Cf.* also *ṣamanasa* in the Chārsada pedestal inscription, above, p. 250.

(2.) The second *akṣara* of this word seems to be very faint in the original and the form appearing in the tracing bears no resemblance to any Kharoṣṭhī letter. Nevertheless, I have no doubt that it really was *tu* or, possibly, *du*.

(3.) These *akṣaras* are quite uncertain.

As the inscription begins exactly like the previous one, there can be little doubt, I think, that it had a similar purport and recorded the gift of the jar " to the congregation of the monks of the four quarters."

With the two inscriptions may be compared the fragment of a third inscription discovered by General Cunningham in a mound near the ruins of Sahri-Bahlol and edited together with a facsimile in *A. S. R.*, Vol. V, p. 44. It consists of a few Kharoṣṭhī letters incised on the outside of a small piece of bowl. Cunningham proposed to read " *Maghe ca* in the upper line and *sa* " — or, more accurately *śa*—" in the lower line. " But a glance at the facsimile will sufficiently show that it is highly improbable that the inscription would have been written in two lines, no trace of any letter being discernible to the left of the supposed *śa*. In my opinion, there can be little doubt, that what Cunningham considered to be *ma* and *śa*, really is only one letter the middle portion of which is broken off. By simply connecting the two pieces by a vertical line, we obtain a perfectly unobjectionable *sa*. The second *akṣara* is *gha* according to the facsimile, but as Cunningham transcribes it by *ghe*, the *e*-stroke may have been omitted. The third *akṣara* is *ca*, the form of the letter resembling that of the *ca* in inscription A. We thus have to read *sagha ca*, or, *saghe ca*, which agrees with the beginning of the two inscriptions on the jars from Chārsada. Trifling as it may appear at first sight, this coincidence can hardly be considered to be the result of a mere chance, if it is remembered that the fragment also is engraved on a piece of jar; on the contrary, it seems to me highly probable, that *saghe ca* is to be restored to *saghe catudiśe*, and that these words belonged to an inscription of the type represented by the two new finds.

As regards the inscription marked C, I am unable to offer any reading or explanation that would satisfy myself. The characters resemble more those of the Manuscript Dutreuil de Rhins than those of the inscriptions, and perhaps it will be possible to read this inscription when the Kharoṣṭhī manuscripts of the Stein Collection will have been rendered accessible to scholars.

H. LÜDERS.

ARCHÆOLOGICAL REPORTS PUBLISHED UNDER OFFICIAL AUTHORITY.

Title of work.	Name and official designation of author.	Press, and date of publication.
INDIA.*		
1. Illustrations of ancient buildings in Kashmir.	H. H. Cole, Lieutenant, R.E., Superintendent, Archæological Survey, North-Western Provinces.	W. H. Allen & Co., 13, Waterloo Place, London, S.W., 1869.
2. Report in connection with operations in the N.-W. Provinces and the Punjab, etc., for 1869-70.	Lieutenant H. H. Cole .	1870.
3. Four reports made during the years, 1862-63-64-65, Volume I. (C. S.)	A. Cunningham, Director-General, Archæological Survey of India.	Government Central Press, Simla, 1871.
4. Four reports made during the years 1862-63-64-65, Volume II. (C. S.)	Ditto . .	Ditto.
5. Report for the year 1871-72, Volume III. (C. S.)	Ditto . .	Superintendent, Government Printing, Calcutta, 1873.
6. Illustrations of buildings near Muttra and Agra, showing the mixed Hindu-Mahomedan style of Upper India.	H. H. Cole, Lieutenant, R.E., Late Superintendent, Archæological Survey, North-Western Provinces.	W. H. Allen & Co., 13, Waterloo Place, London, S.W., 1873.
7. "Tree and Serpent Worship" from the sculptures of the Buddhist Topes at Sanchi and Amaravati.	James Fergusson, D.C.L., F.R.S.	Ditto.
8. Report for the year 1871-72. Delhi and Agra, Volume IV. (C. S.)	J. D. Beglar and A. C. L. Carlleyle, Assistants, Archæological Survey of India.	Superintendent, Government Printing, Calcutta, 1874.

* NOTE.—The continued series of reports by A. Cunningham (Director-General of the Archæological Survey of India), which extend over the years 1862-1884 inclusive, are marked (C. S.) in this list.

The reports of the New Imperial Series, which began in 1874 and are still in progress, are marked (N. I. S.).

Title of work.	Name and official designation of author.	Press, and date of publication.
INDIA—*contd.*		
9. Report of the first season's operations in the Belgâm and Kaladgi districts. (N. I. S.)	J. Burgess, Archæological Surveyor and Reporter to Government.	W. H. Allen & Co., 13, Waterloo Place, London, S.W., 1874.
10. The Antiquities of Orissa, Volume I.	Râjendralâla Mitra . .	Wyman & Co., Calcutta, 1875.
11. Report for the year 1872-73, Volume V. (C. S.)	A. Cunningham, Director-General, Archæological Survey of India.	Superintendent, Government Printing, Calcutta, 1875.
12. Report on the antiquities of Kâṭhiâwâḍ and Kachh. (N. I. S.)	J. Burgess, Archæological Surveyor and Reporter to Government, Western India.	W. H. Allen & Co., 13, Waterloo Place, London, S.W., 1876.
13. Corpus Inscriptionum Indicarum. Volume I, Inscriptions of Asoka.	A. Cunningham, Director-General, Archæological Survey of India.	Superintendent, Government Printing, Calcutta, 1877.
14. The Rock Temples of Elura or Verul.	J. Burgess . . .	1877.
15. Report on the antiquities in the Bidar and Aurangabad districts. (N. I. S.)	J. Burgess, Archæological Surveyor and Reporter to Government, Western India.	W. H. Allen & Co., 13, Waterloo Place, London, S.W., 1878.
16. Report of a tour in Eastern Rajputana in 1871-72 and 1872-73, Volume VI. (C. S.)	A. C. L. Carlleyle, Assistant, Archæological Survey.	Superintendent, Government Printing, Calcutta, 1878.
17. Report of a tour in Bundelkhand and Malwa, 1871-72; and in the Central Provinces, 1873-74, Volume VII. (C. S.)	J. D. Beglar, Assistant, Archæological Survey.	Ditto.
18. Report of a tour through the Bengal Provinces of Patna, Gaya, Mongir, and Bhagalpur; The Santal Parganas, Manbhum, Singhbhum, and Birbhum; Bankura, Raniganj, Bardwan, and Hughli in 1872-73, Volume VIII. (C. S.)	Ditto . .	Ditto.
19. Pali, Sanskrit, and old Canarese Inscriptions from the Bombay Presidency and parts of the Madras Presidency and Maisur, arranged and explained.	J. F. Fleet, Bombay Civil Service, and J. Burgess, Archæological Surveyor, Western India.	G. E. Eyre and W. Spottiswoode, London, 1878.
20. The Stūpa of Bharhut: a Buddhist monument ornamented with numerous sculptures, illustrative of Buddhist legend and history in the third century B. C.	A. Cunningham, Director-General, Archæological Survey of India.	W. H. Allen & Co., 13, Waterloo Place, London, S.W., 1879.

Title of work.	Name and official designation of author.	Press, and date of publication.
INDIA—*contd.*		
21. Report of tours in Central Doab and Gorakhpur in 1874-75 and 1875-76, Volume XII. (C. S.)	A. C. L Carlleyle, 1st Assistant, Archæological Survey.	Superintendent, Government Printing, Calcutta, 1879.
22. Report of a tour in the Central Provinces in 1873-74 and 1874-75, Volume IX. (C. S.)	A. Cunningham, Director-General, Archæological Survey of India.	Ditto.
23. Report of tours in Bundelkhand and Malwa in 1874-75 and 1876-77, Volume X. (C. S.)	Ditto . . .	Ditto, 1880.
24. Report of tours in the Gangetic Provinces from Badaon to Bihar in 1875-76 and 1877-78, Volume XI. (C. S.)	Ditto . . .	Ditto.
25. Report on the Amarávati tope and excavations on its site in 1877.	R. Sewell, Madras Civil Service.	G. E. Eyre and W. Spottiswoode, 1880.
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30. Report of a tour in the Punjab in 1878-79, Volume XIV. (C. S.)	A. Cunningham, Director-General, Archæological Survey of India.	Ditto.
31. Report of a tour in Bihar and Bengal in 1879-80 from Patna to Sunargaon, Volume XV. (C. S.)	Ditto . . .	Ditto.
32. Lists of Antiquarian Remains in the Presidency of Madras. (N. I. S.)	R. Sewell, Madras Civil Service.	Government Press, Madras, 1882.
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(*a*) Madras Presidency—		
The Seven Pagodas . .	Ditto . . .	Ditto.

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(*a*) Madras Presidency—*contd.*		
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Trichinopoly	Ditto . . .	Ditto.
Srirangam	Ditto . . .	Ditto.
Madura	Ditto . . .	Ditto.
Tanjore	Ditto . . .	Ditto.
Kombakonam . . .	Ditto . . .	Ditto.
Chillambaram . . .	Ditto . . .	Ditto.
Conjeveram	Ditto . . .	Ditto.
Bijanagar	Ditto . . .	Ditto.
(*b*) Bombay Presidency—		
Ahmedabad	Ditto . .	Ditto.
Poona	Ditto . . .	Ditto
Karli	Ditto . . .	Ditto.
Ambarnath	Ditto . . .	Ditto.
Elephanta	Ditto . . .	Ditto.
(*c*) Bijapur	Ditto . . .	Ditto.
(*d*) Rajputana—		
Mount Abu	Ditto . . .	Ditto.
Ajmir	Ditto . . .	Ditto.
Jaipur	Ditto . . .	Ditto.
Ulwar	Ditto . . .	Ditto.
(*e*) H. H. the Nizam's Territory—		
Kalburgah	Ditto . .	Ditto.

Title of work.	Name and official designation of author.	Press, and date of publication.
INDIA—*contd.*		
(*f*) Punjab—		
(Memorandum on Ancient Monuments in Eusafzai, with a description of the explorations undertaken from the 4th February to the 16th April 1883, and suggestions for the disposal of the sculptures.)	H. H. Cole, Curator of Ancient Monuments in India.	Government Central Branch Press, Simla, 1881 to 1883.
34. Second Report of the Curator of Ancient Monuments in India for the year 1882-83.	Ditto . . .	Superintendent, Government Printing, Calcutta, 1883.
35. Report on the Buddhist Cave Temples and their Inscriptions. (N. I. S.)	J. Burgess, Archæological Surveyor and Reporter to Government for Western and Southern India.	Ballantyne, Hanson & Co., Edinburgh and London, 1883.
36. Report of tours in North and South Bihar in 1880-81, Volume XVI. (C. S.)	A. Cunningham, Director-General, Archæological Survey of India, and H. B. W. Garrick, Assistant, Archæological Survey.	Superintendent, Government Printing, Calcutta, 1883.
37. Preservation of National Monuments—Fortress Gwalior.	J. B Keith, Superintending Monumental Preservation.	Ditto.
38. Catalogue and Hand-Book of the Archæological Collections in the Indian Museum, Part I—Asoka and Indo-Scythian Galleries.	J. Anderson, Superintendent, Indian Museum.	Ditto.
39. Ditto ditto, Part II—Gupta and Inscription Galleries.	Ditto . . .	Ditto.
40. Report of a tour in Gorakhpur district in 1875-76 and 1876-77, Volume XVIII. (C. S.)	A. C. L. Carlleyle, 1st Assistant, Archæological Survey.	Ditto.
41. Report on the Elura cave temples and the other Brahmanical and Jaina caves in Western India, (N. I. S.)	J. Burgess, Archæological Surveyor and Reporter to Government for Western and Southern India.	Ballantyne, Hanson & Co., Edinburgh and London, 1883.
42. Report of a tour in the Central Provinces and Lower Gangetic Doab in 1881-82, Volume XVII. (C. S.)	A. Cunningham, Director-General, Archæological Survey of India.	Superintendent, Government Printing, Calcutta, 1884.
43. Lists of Inscriptions and Sketch of the Dynasties of Southern India. (N. I. S.)	R. Sewell, Madras Civil Service.	Government Press, Madras, 1884.

Title of work.	Name and official designation of author.	Press, and date of publication.
INDIA—*contd.*		
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(*a*) Agra and Gwalior . .	Ditto . .	Ditto.
(*b*) Golden temple at Amritsar, Punjab.	Ditto . .	Ditto.
(*c*) Delhi	Ditto . .	Ditto.
(*d*) Græco-Buddhist sculptures from Yusufzai.	Ditto . .	Ditto.
(*e*) Great temple to Siva and his consort at Madura.	Ditto . .	Ditto.
(*f*) Meywar	Ditto . .	Ditto.
(*g*) Buildings of the Punjab .	Ditto . .	Ditto.
(*h*) Great Buddhist Tope at Sanchi.	Ditto . .	Ditto.
(*i*) Tomb of Jahangir at Shahdara near Lahore.	Ditto . .	Ditto.
(*j*) The temples at Trichinopoly	Ditto . .	Ditto.
45. Third Report of the Curator of Ancient Monuments in India for the year 1883-84.	Ditto . .	Superintendent, Government Printing, Calcutta, 1885.
46. Report of a tour through Bihar, Central India, Peshawar, and Yusufzai, during 1881-82, Vol. XIX. (C. S.)	H. B. W. Garrick, Assistant, Archæological Survey.	Ditto.
47. Report of a tour in Eastern Rajputana in 1882-83, Vol. XX. (C. S.)	A. Cunningham, Director-General, Archæological Survey of India.	Ditto.
48. Reports of a tour in Bundelkhand and Rewa in 1883-84 and of a tour in Rewa, Bundelkhand, Malwa, and Gwalior in 1884-85, Vol. XXI. (C. S.)	Ditto . .	Ditto.
49. Report of tours in Gorakhpur, Saran, and Ghazipur in 1877-78-79 and 80, Vol. XXII. (C. S.)	A. C. L. Carlleyle, 1st Assistant, Archæological Survey.	Ditto.
50. Report of a tour in the Punjab and Râjpûtâna in 1883-84, Vol. XXIII. (C. S.)	H. B. W. Garrick, Assistant, Archæological Survey.	Ditto, 1887.

Title of work.	Name and official designation of author.	Press, and date of publication.
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52. The Buddhist stūpas of Amaravati and Jaggayyapeta in the Krishna District, Madras Presidency, with translations of the Asoka Inscriptions at Jaugada and Dhauli. (N. I. S.)	J. Burgess, Director-General, Archæological Survey of India, and G. Bühler, Ph. D., LL.D., C.I.E., etc.	Ballantyne, Hanson & Co., Edinburgh and London, 1887.
53. List(s) of photographs of Ancient Buildings and Antiquities.	......	Government of India, Central Printing Office, Calcutta, 1887.
54. Corpus Inscriptionum Indicarum, Vol. III. (Gupta Inscriptions.)	J. F. Fleet . . .	Superintendent, Government Printing, Calcutta, 1888.
55. The Sharqi Architecture of Jaunpur. (N. I. S.)	A. Führer, Archæological Survey, North-Western Provinces and Oudh, and E. W. Smith, Architectural Assistant.	Ditto, 1889.
56. Jeypore Portfolio of Architectural Details; Parts I—X.	Colonel S. S. Jacob, C.I.E. .	Griggs and Sons, London, 1890-98.
57. South Indian Inscriptions (Vol. I). (N. I. S.)	E. Hultzsch, Government Epigraphist.	Government Press, Madras, 1890.
58. List of photographic negatives of Ancient Buildings and Antiquities in the Imperial Museum, Calcutta.	J. Wood-Mason and J. D. Beglar.	1890.
59. South Indian Inscriptions (Vol. II). (N. I. S.)	E. Hultzsch, Government Epigraphist.	Government Press, Madras, 1891-95.
60. The Monumental Antiquities and Inscriptions in the North-Western Provinces and Oudh. (N. I. S.)	A. Führer, Archæological Survey, North-Western Provinces and Oudh.	Government Press, North-Western Provinces and Oudh, 1891.
61. Epigraphia Indica of the Archæological Survey of India, Vol. I. (N. I. S.)	J. Burgess, late Director-General, Archæological Survey of India.	Superintendent, Government Printing, Calcutta, 1892.
62. Mahabodhi or the Great Buddhist Temple under the Bodhi tree, at Buddha Gaya.	A. Cunningham, late Director-General, Archæological Survey of India.	W. H. Allen & Co., 13, Waterloo Place, London, S. W., 1892.
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65. South Indian Buddhist Antiquities. (N. I. S.)	A. Rea, Superintendent, Archæological Survey, Madras.	Government Press, Madras, 1894.
66. List of Architectural and Archæological Remains in Coorg. (N. I. S.)	Ditto . .	Ditto.
67. List of photographic negatives belonging to the India Office.	......	Ditto.
68. Bower Manuscripts. (N. I. S.) .	A. Hœrnle, Principal, Calcutta Madrassah.	Superintendent, Government Printing, Calcutta, 1893-97.
69. The Moghul Architecture of Fathpur-Sikri, Parts I—IV. (N. I. S.)	E. Smith, Archæological Survey, North-Western Provinces and Oudh.	Government Press, North-Western Provinces and Oudh, 1894-98.
70. On the Muhammadan Architecture in Gujarat. (N. I. S.)	J. Burgess, late Director-General, Archæological Survey of India.	Eyre and Spottiswoode, London, 1896.
71. Chȃlukyan Architecture, including examples from the Ballȃri District, Madras Presidency. (N. I. S.)	A. Rea, Superintendent, Archæological Survey, Madras.	Government Press, Madras, 1896.
72. Lists of Antiquarian Remains in the Central Provinces and Berȃr. (N. I. S.)	H. Cousens, Superintendent, Archæological Survey, Bombay.	Superintendent, Government Printing, Calcutta, 1897.
73. Monumental Remains of the Dutch East India Company in the Presidency of Madras. (N. I. S.)	A. Rea, Superintendent, Archæological Survey, Madras.	Government Press, Madras, 1897.
74. Revised lists of Antiquarian Remains in the Bombay Presidency. (N. I. S.)	H. Cousens, Superintendent, Archæological Survey, Bombay.	Government Central Press, Bombay, 1897.
75. South Indian Inscriptions (Volume III, Part I). (N. I. S.)	E. Hultzsch, Government Epigraphist.	Government Press, Madras, 1899.
76. A list of photographic negatives of Indian antiquities in the collection of the Indian Museum with which is incorporated the list of similar negatives in the possession of the India Office.	Dr. T. Bloch, 1st Assistant Superintendent, Indian Museum.	Superintendent, Government Printing, Calcutta, 1900.

Title of work.	Name and official designation of author.	Press, and date of publication.
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78. The Muhammadan Architecture of Ahmedabad, Part I. (N. I. S.)	J. Burgess, late Director-General, Archæological Survey of India.	Eyre and Spottiswoode, London, 1900.
79. Report on results of explorations in the Nepal Tarai, Part I. (N. I. S.)	P. C. Mukherji, lately employed on Archæological explorations under the Government of the North-Western Provinces and Oudh.	Superintendent, Government Printing, Calcutta, 1901.
80. The Jaina Stūpa and some other Antiquities of Mathurâ. (N. I. S.)	V. A. Smith, Indian Civil Service.	Government Press, United Provinces, 1901.
81. Moghul Colour Decoration of Agra, Part I. (N. I. S.)	E. Smith, Archæological Surveyor, North-Western Provinces and Oudh.	Ditto.
82. The Architectural Antiquities of Northern Gujarat.	J. Burgess, late Director-General, Archæological Survey of India, and H. Cousens, Superintendent, Archæological Survey, Western India.	Eyre and Spottiswoode, London, 1903.
83. Annual Report of the Director-General of Archæology in India for the year 1902-03, Parts I and II.	J. H. Marshall, Director-General of Archæology in India.	Superintendent, Government Printing, India, Calcutta, 1904.
84. Ditto for the year 1903-04, Parts I and II.	Ditto . .	Ditto, 1905-06.
MADRAS—		
85. Notes on the Amaravatī Stūpa .	J. Burgess, Government Archæological Surveyor for Western and Southern India.	Government Press, Madras, 1882.
86. Notes and Inscriptions from Temples in the Madura District, Vol. IV.	Ditto . .	Ditto, 1885-86.
87. Tamil and Sanskrit Inscriptions with some notes on village antiquities collected chiefly in the south of the Madras Presidency.	Ditto . .	Ditto, 1886.
88. List of ancient monuments for conservation in the Madras Presidency in 1884.	Ditto . .	Ditto, 1886-87.

Title of work.	Name and official designation of author.	Press, and date of publication.
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91. Ditto, Vol. IV, 1896-97	Ditto .	Ditto, 1897.
92. Ditto, „ V, 1898-99	Ditto . .	Ditto, 1899.
93. Ditto, „ VI, 1900-01	Ditto . .	Ditto, 1901.
94. Ditto, „ VII, 1902-03	Ditto . .	Ditto, 1904.
95. List of tombs and monuments of Europeans, etc., in the Madras District.	Government of Madras .	Government Press, Madras, 1898.
96. List of tombs and monuments erected in Madras.	Ditto . .	Ditto
97. List of statues, monuments and busts erected in Madras in honour of distinguished servants of the State.	Ditto . .	Ditto.
98. Annual Report of the Archæological Survey, Madras and Coorg, for the year 1899-1900.	A. Rea, Superintendent, Archæological Survey.	Ditto, 1900.
99. Ditto 1900-1901 .	Ditto . .	Ditto, 1901.
100. Ditto 1901-1902 .	Ditto . .	Ditto, 1902.
101. Ditto 1902-1903 .	Ditto . .	Ditto, 1903.
102. Ditto 1903-1904 .	Ditto . .	Ditto, 1904.
103. Ditto 1904-1905 .	Ditto . .	Ditto, 1905.
104. Report on Epigraphical work accomplished from July 1891 to June 1892.	E. Hultzsch, Government Epigraphist.	Ditto, 1892.
105. Ditto July 1892 to June 1893.	Ditto . .	Ditto, 1893.
106. Ditto do. 1893 to do. 1894.	Ditto . .	Ditto, 1894.
107. Ditto do. 1894 to do. 1895.	Ditto . .	Ditto, 1895.
108. Ditto do. 1895 to do. 1896.	Ditto . .	Ditto, 1896.

Title of work.	Name and official designation of author.	Press, and date of publication.
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110. Ditto July 1897 to June 1898.	Ditto . .	Ditto, 1898.
111. Ditto do. 1898 to do. 1899.	V. Venkayya, 1st Assistant to the Government Epigraphist.	Ditto, 1899.
112. Ditto do. 1899 to do. 1900.	Ditto . .	Ditto, 1900.
113. Ditto do. 1900 to do. 1901.	E. Hultzsch, Government Epigraphist.	Ditto, 1901.
114. Ditto do. 1901 to do. 1902.	Ditto . .	Ditto, 1902.
115. Ditto do. 1902 to do. 1903.	Ditto . .	Ditto, 1903.
116. Ditto do. 1903 to do. 1904.	V. Venkayya, Officiating Government Epigraphist.	Ditto, 1904.
117. Ditto do. 1904 to do. 1905.	Ditto . .	Ditto, 1905.
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119. The Antiquities of Kolhapoor illustrated. (Ser. 350, Sel. Rec. Bombay, N. S. No. 8.)	......	1854.
120. Extracts in connection with Mahomedan Architecture at Beejapoor, in the Satara Districts, etc., (1854). (Ser. 350, Sel. Rec. Bombay, N. S. No. 40.)	.. ...	1857.
121. Observations on inscriptions on copper-plates dug up at Naroor, in the Koodal Division of the Sawunt Waree State, 1848; with translations and facsimiles, 1851. (Ser. 350, Sel. Rec. Bombay, N. S. No. 10.)	Major G. LeG. Jacob .	1855.
122. Rock-cut Temples of Western India.	J. Fergusson, F.R.S., M.R.A.S.	Cundall and Downes, London, 1864.

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124. Notes to accompany a series of photographs designed to illustrate the Ancient Architecture of Western India.	Captain Lyon, late of Her Majesty's 68th Regiment of Light Infantry.	Carey Brothers, Old College Street, 3, Geneva, 1871.
125. Memorandum on the Buddhist Caves at Junnar.	James Burgess, Archæological Surveyor and Reporter to Government, and J. F. Fleet, Bo. C.S.	Government Central Press, Bombay, 1874.
126. Memorandum on the antiquities at Dabhoi, Ahmedabad, Than, Junagaḍh, Girnar, and Dhank.	James Burgess, Archæological Surveyor and Reporter to Government.	Ditto, 1875.
127. Memorandum on the remains at Gumli, Gop, and in Kachh, etc.	Ditto . .	Ditto.
128. Provisional lists of Architectural and other Archæological remains in Western India, including the Bombay Presidency, Sindh, Berar, Central Provinces, and Hyderabad.	Ditto . .	Ditto.
129. Translations of inscriptions from Belgaum and Kaládgi Districts in the report of the first season's operations of the Archæological Survey of Western India and of inscriptions from Kathiawar and Kachh.	J. F. Fleet, Bo. C.S., and Hari Vaman Limaya, B.A.	Ditto, 1876.
130. Buddhist Caves of Ajanta. Second edition.	Prepared by Major R. Gill and revised by James Burgess, F.R.G.S., M.R.A.S.	Ditto.
131. Notes on the antiquities of the Talukas of Parner, Sangamner, Ankole, and Kopergaum forming the charge of the 2nd Assistant Collector, Ahmadnagar, with revised lists of remains in the Ahmadnagar, Nasik, Puna, Thana, and Kaládgi Zillahs.	W. F. Sinclair, Bo. C.S., and J. Burgess, Archæological Surveyor and Reporter to Government.	Ditto, 1877.
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Title of work.	Name and official designation of author.	Press, and date of publication.
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134. Report on the Architectural and Archæological remains in the Province of Kachh, with 5 papers by the late Sir Alex. Burnes. (Selections from the records of the Bombay Government, No. CLII, new series.)	Dalpatram Pranjivan Khakhar.	Ditto.
135. Notes on the Buddha Rock-Temples of Ajanta, their paintings and sculptures, and on the paintings of the Bagh Caves, modern Buddha Mythology, etc.	J. Burgess, Archæological Surveyor, Western India.	Ditto.
136. Inscriptions from the Cave Temples of Western India with descriptive notes, etc.	J. Burgess, Archæological Surveyor, and Bhagwanlal Indraji Pandit.	Ditto, 1881.
137. Lists of the antiquarian remains in the Bombay Presidency, Sindh and Berâr, with an Appendix of inscriptions from Gujarat.	J. Burgess, Archæological Surveyor and Reporter to Government.	Ditto, 1885.
138. Scheme for the protection and conservation of ancient buildings in and around the City of Ahmedabad.	A. W. Crawley-Boevy, C.S.	Education Society's Press, Bombay, 1886.
139. List of Photographs of ancient buildings and antiquities, Bombay.	......	Superintendent, Government Printing, Calcutta, 1887.
140. The Antiquities of the town of Dabhoi in Gujarat.	James Burgess, LL.D., C.I.E., Director-General of the Archæological Survey of India, and H. Cousens, MR.A.S., Archæological Surveyor, Western India.	George Waterston & Sons, Edinburgh, 1888.
141. List of Photographic Negatives of ancient buildings and antiquities of the Bombay Presidency.	H. Cousens, M.R.A.S., Archæological Surveyor, Western India.	Government Central Press, Bombay, 1888.
142. List of Photographic Negatives of the paintings copied from the Ajanta Caves between 1872 and 1885 at the Government School of Art, Bombay. Supplement to the Bombay List of Photographic Negatives.	James Burgess . . .	Government of India Central Printing Office, Calcutta, 1889.

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144. Notes on the buildings and other antiquarian remains at Bijapur, with translations of the inscriptions.	H. Cousens, Archæological Surveyor, Western India, and E. Rehatsek.	Government Central Press, Bombay, 1890.
145. An account of the Caves at Nadsur and Karsambla.	H. Cousens, Archæological Surveyor, Western India.	Ditto, 1891.
146. Progress Report of the Archæological Survey of Western India for the months of December 1889 to April 1890.	Ditto . . .	Ditto, 1890.
147. Ditto for the months of May 1890 to April 1891.	Ditto . . .	Ditto, 1891.
148. Ditto for the months of May 1891 to April 1892.	Ditto . . .	Ditto, 1892.
149. Ditto for the months of May 1892 to April 1893.	Ditto . . .	Ditto, 1893.
150. Ditto for the months of May 1893 to April 1894.	Ditto . . .	Ditto, 1894.
151. Ditto for the months of May 1894 to August 1895.	Ditto . . .	Ditto, 1895.
152. Ditto for the months of September 1895 to April 1896.	Ditto . . .	Ditto, 1896.
153. Ditto for the year ending 30th June 1897.	Ditto . . .	Ditto, 1897.
154. Ditto for the year ending 30th June 1898.	Ditto . . .	Ditto, 1898.
155. Ditto for the year ending 30th June 1899.	Ditto . . .	Ditto, 1899.
156. Ditto for the year ending 30th June 1900.	Ditto . . .	Ditto, 1900.
157. Ditto for the year ending 30th June 1901.	Ditto . . .	Ditto, 1901.
158. Ditto for the year ending 30th June 1902.	Ditto . . .	Ditto, 1902.
159. Ditto for the year ending 30th June 1903.	Ditto . . .	Ditto, 1903.
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162. Paintings in the Buddhist Cave-Temples of Ajanta, Khandesh, India. Volume I (Pictorial subjects).	John Griffiths, late Principal of the Sir Jamshedji Jijibhai School of Art, Bombay, Fellow of the University of Bombay, Member of the Bombay Branch of the Royal Asiatic Society.	W. Griggs, London, 1896.
163. Ditto ditto, Volume II (Decorative details).	Ditto . . .	Ditto, 1897.
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164. Account of a visit to Mount Parisnath (in Chutia Nagpoor) and the Jain Temples thereon in 1827. (Ser. 250. Sel. Rec. Bengal, No. 38.)	A. P.	1861.
165. Ruins of the Nalanda Monasteries at Burgaon, Sub-division Bihar, District Patna.	A. M. Broadley, B.C.S. .	Bengal Secretariat Press, 1872.
166. Report on the Archæology of the District of Midnapore.	H. L. Harrison, B.C.S. .	Ditto, 1873.
167. Buddha Gaya, the Hermitage of Śákya Muni.	Rájendralála Mitra, LL.D., C.I.E.	Ditto, 1878.
168. List of objects of antiquarian interest in Bengal.	......	Ditto, 1879.
169. A List of the objects of antiquarain interest in the Lower Provinces of Bengal (with historical descriptions).	......	Ditto, 1879.
170. Revised list of ancient monuments in Bengal, 1886.	Government of Bengal, P. W. Department, assisted by J. D. Beglar and W. B. B.	Ditto, 1887.
171. Some Historical and Ethnical aspects of the Burdwan District.	W. B. Oldham, C.I.E., Indian Civil Service.	Ditto, 1891.
172. Discovery of the exact site of Aśoka's classic Capital of Pāṭaliputra, the *Palibothra* of the Greeks, and description of the superficial remains.	L. A. Waddell, M.B. . .	Ditto, 1892.

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174. Sikkim Gazetteer . . .	......	Ditto, 1894.
175. Some Historical and Ethnical aspects of the Burdwan District with an explanatory Index (Reprint).	W. B. Oldham, C.I.E., Indian Civil Service.	Ditto.
176. List of Statues, Monuments, and Busts in Calcutta of Historical interest.	......	Ditto.
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